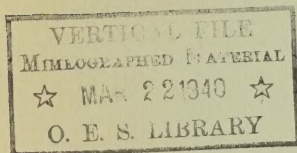


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LAND-USE PLANNING AND ITS RELATION
TO PROGRAM DETERMINATION



SOUTHERN STATES

A GROUP OF PAPERS

Presented at

TWO REGIONAL CONFERENCES

Texarkana, Texas

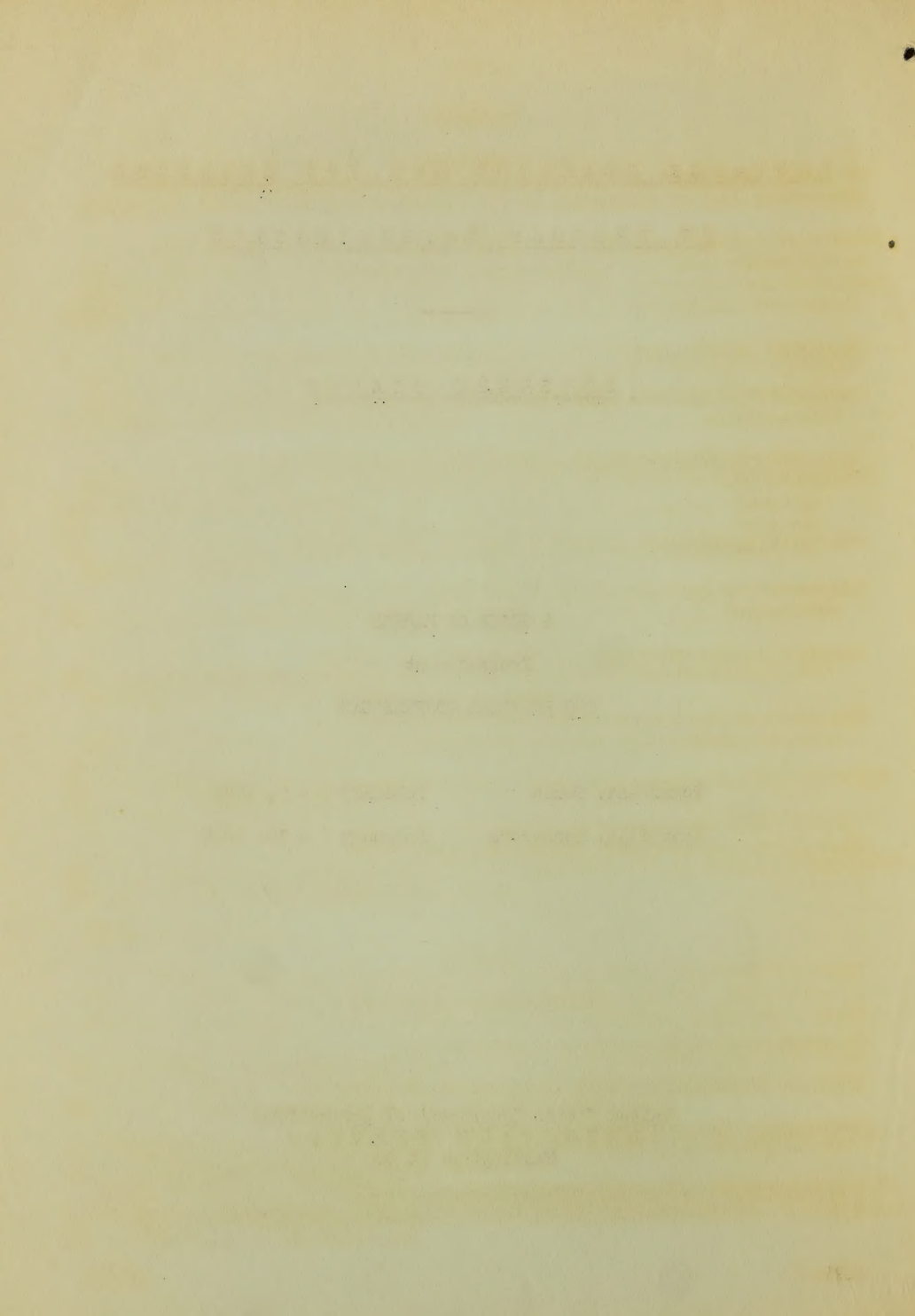
February 6 - 7, 1939

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(Presented at Texarkana)

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FOREWORD

Two southern regional conferences were held at Texarkana, Tex., and Knoxville, Tenn., with approximately 200 in attendance at each conference.

The topics of the conference dealt with land-use planning as a basis for program determination. The functioning of the whole Extension organization as it relates to present situations was discussed from the standpoint of maximum service in cooperation with other Government activities.

Reuben Brigham, assistant director; H. R. Tolley, chief, Bureau of Agricultural Economics; O. E. Baker, senior economist, Bureau of Agricultural Economics; and Miss Norma M. Brumbaugh, home demonstration agent, Oklahoma, attended both conferences.

I. E. Duggan, director, Southern Division, AAA, spoke at the Knoxville conference, and his paper was again presented by Fred Merrifield at the Texarkana meeting.

W. G. Finn, director, East Central Division, AAA, took part in the Knoxville program.

The following talks given at the conference and previously distributed are available in mimeographed form.

Given at Texarkana and Knoxville:

- *We Go Forward. Reuben Brigham. (Ext. Serv. Cir. No. 299, February 1939, 17 pp.)
- **The Department of Agriculture and the Land-Grant Colleges Today. H. R. Tolley. (Bur. Agr. Econ. Cir., 24 pp.)
- *Population Trends in Relation to Land Use. O. E. Baker. (Ext. Serv. Cir. No. 311, June 1939, 12 pp.)

Given at Knoxville:

- ***What Adjustment Can Farmers of the South Make This Year That Will Enable Them To Improve Income and Family Living? Miss Norma M. Brumbaugh. (Agricultural Adjustment Administration cir., March 18, 1939.)
- ***What Adjustment Can Farmers of the South Make This Year That Will Enable Them To Improve Income and Family Living? I. W. Duggan. (Agricultural Adjustment Administration cir.)

* May be obtained from Extension Service, United States Department of Agriculture, Washington, D. C.

** May be obtained from Bureau of Agricultural Economics, Washington, D. C.

*** May be obtained from Agricultural Adjustment Administration, Washington, D. C.

LAND-USE PLANNING AND ITS RELATION

TO PROGRAM DETERMINATION

SOUTHERN STATES

PART I

(Presented at Texarkana)

TENTATIVE PLAN OF WORK

C. L. Chambers
Principal Agriculturist, Extension Service
U. S. Department of Agriculture

Situation

I have not as yet had an opportunity to determine the full significance of my new position in Dr. Warburton's office. It seems to be to assist him with (a) budgets, (b) inspection, (c) plans of work, and I assume (d) analysis of the functioning of our organization as it relates to these important jobs.

(a) I am extremely doubtful as to my approximating Dr. Warburton's ability to quote expenditures budgeted for the Southern Region, much less the whole of the United States.

(b) I plan to continue analyzing the amounts budgeted and expended in the light of the amounts budgeted. It is my intention to study the project expenditures by States and, if possible, develop a more uniform allotment of funds by projects so that performance may be studied. Project expenditures by States are vastly different at present, and there is no correlation between amounts budgeted and performance.

(c) Thanks to the cooperation of southern directors, the extension workers involved, and of our specialist staff in Washington, we have plans of work I will be pleased to compare with those of any other region at present. There is a phenomenal improvement over plans submitted 5 years ago when little interest was shown except to get budgets approved. I hope we may develop ways of measurement of supervisory and specialist activity as well as results attained, so that we may have a method of measuring results, which is now impossible because of our antiquated national annual county agent report.

An analysis of reports of duties performed during the planning period while staff is in the office should be more valuable to the directors in comparing performance in the light of organization set-up and methods used.

The Southern Region has an enviable record for its performance in the "New Deal" activities. Special effort has been put forth not only to coordinate work with that of other agencies, but to integrate our own work; however, we have been so busy actually doing the job we have not had the complete functioning of our whole organization. But this is not peculiar to the Southern Region.

Our district supervisors do not always supervise the functioning of the organization in their districts as they once did. They have often become trouble shooters for other Government agencies. Our enterprise specialists have not always taken advantage of the pulling force of other Government agencies in advancing their own work. In this day of economic urge all enterprise specialists have not caught the vision of the whole farm and home approach. Farm-management specialists have not always made an effort to train the enterprise specialists in this most important approach, nor have the farm and home-management specialists been trained in economic production by the enterprise specialists. All must know more about fitting economically produced enterprise into farm and home operations and study their relation to income. From the standpoint of the Southern Section of the Washington office, we have developed a coordinated effort of our specialists and encouraged this type of functioning, as will be shown by the subjects that appear on our yearly regional programs and the materials we have developed with the aid of our Washington specialist staff. Since 1935 we have had discussions by directors, supervisors, and specialists embracing these important phases of our work.

It was impossible to avoid this condition largely because we have had new programs every year, and sometimes twice each year. Our directors have felt they must keep up with the latest and have traveled about half of their time to familiarize themselves with the ever-changing programs. They have not had time to think of the functioning of their organization. They have not placed the emphasis on program determination with leading farm people in the counties, because of limited time to do the AAA job, and it held major interest of farm people. The organization had to run itself, and it is fortunate we had such a well-trained organization and such a friendly relationship with other organizations, or we would not be so proud now of our accomplishment, and this accomplishment is phenomenal. Farm leadership has aided not only in the AAA work, but in spreading improved practices to the lower-income group it was almost impossible to reach previously because of lack of finance the new agencies provide.

The enterprise specialists were in a state of quandary because of two conditions. First, it was impossible to take the time to properly advise them as to their relationship to a control program. They had trained in a maximum production program and could not understand their relation to a reduction program. They must shift to an economic production program based

on a sound farm and home management, and provide data which will prove economic production will add to income according to type of farm involved. They should attack the problem in its broadest aspect of conservation. They must be helped more to provide data that will show how income can be increased through providing economically produced farm and home food and feed needs. We cannot usually compete with other areas in providing these products for sale because of low production yields. This subsistence factor alone often exceeds the total income of the lower group, and this procedure would avoid the "furnish" hazard which is a major problem of landlord and tenant alike. Income is our major problem on small farms, and yet we have millions of acres of weeds where food and feed or soil-conserving crops should be produced.

The perplexity in the minds of the specialist and the 4-H Club agent because of lack of attention, both in the State office and in the county, has led to their taking on the administrative attitude complex, thinking this would solve their problem. Directors have been urged to put on more specialists and club agents.

Through suggestions in connection with specialist's plans of work, we have been successful in arousing greater interest of specialists in 4-H Club work. Thus, coupled with the addition of assistant county agents, who do both lines of work, we have had 65 per cent of all increase in club work in the South. In spite of our efforts in the Washington office to get our State 4-H Club people to realize the importance of the functioning of the whole organization in the interest of club work, some of our club agents have drifted from the fundamentals and have become too greatly interested in the frills we are all interested in as a capstone.

The two States that have put on the largest club staff are the only two that had a reduction in enrollment in the South. Each State had a reduction of approximately 3,000 members in 1937. We have a total of 168 club agents for the whole United States and only 38 of these were in the South; yet we had almost half of the total enrollment in 1937. We had 78 percent of the total increase in enrollment in 1936 and 65 percent of the proportion of increase in 1937. The four States that have made their reports for 1938 have an increase of more than 26,000 club members, which is far in excess of previous years and almost equal to our increase for the South the previous years. If other Southern States increase in proportion, the South will have more than half of all club enrollment.

It may prove worth while to analyze the organization set-up of the Southern Region in the light of the foregoing applied measuring stick.

We have in the United States a total of 1,570 specialists, with 403 of these in the South. The South has an average of 1 specialist for each 7.7 agents. One other region has 1 specialist for each 1.7 agents. We have a total of 6,488 county agents with 3,113 in the Southern Region. The South had 1,203 home demonstration agents compared with 933 for the rest of the country. What an opportunity for 4-H Club enrollment if each agent assumed a man-sized job, aided by all specialists.

In the South we have had the idea that the function of specialists is to train county agents. I am extremely doubtful of another method of training I have observed in several Southern States, through inspection, which is designed to "train leaders" in a restricted area of the State. The plan seems to be a patent project, carried out in a pedagogical way with county agents serving as chauffeurs for the leaders. Other agents may not even observe training of leaders for several years. If this is continued or enlarged upon, it will doubtless lead to increasing the specialist staff to cover the State, and the county agents will fail to get the specialist training they need.

We need in the South economists with a broader vision than farm-management specialists have. Our farm-management specialists seem to be satisfied with the individual farm approach and with limiting the use of the facts to their personal use, or in placing facts in the archives without any use. A farm-management specialist recently called to my attention some excellent farm-management records. Some of the dairy and agronomy records were unusually good as they mapped the farms on a reorganized or projected farm-management plan. I asked what the dairy and agronomy specialists thought of these and was informed they had never seen them. The farm-management specialists, in fact, practically all specialists, are satisfied with getting records and storing them away without analysis for general use in program determination.

It seems that major effort will be devoted to land-use mapping very accurately done under the direction of well-trained technicians; while Secretary Wallace has the vision of its function being that of provoking thinking on the part of rural people. Secretary Wallace has shown extreme interest in the tenant and sharecropper making up the lower-income group that is the major problem of the South. However, none of the present plans indicate how his problems will be studied from the standpoint of income. Those who should be vitally concerned seem to be satisfied with instructing in platitudinous remarks or in projecting a patent project without making analysis of farm and home data involving these people on an area basis, nor in studying the historical or sociological background where the controlling factors are to be found.

It seems to be the plan to study land-use planning intensively and, I may say, scientifically perfect it in one county in a State. Program determination is to be supervised and experimented with by those who have done none of it, though many years have been devoted to it by those who have been assigned duties foreign to its direction. It is conceded we may have our methods determined in key counties 3 years from now, while our lands are washing away, and little conservation practice put into effect where most needed.

Our present predicament, so far as the tenant is concerned, grew out of the Civil War, as is depicted in my paper, Methods of Arriving at Economic Readjustments for the South. Our methods of attack should be similar to that depicted in this paper, but streamlined to our present situation involving new Government agencies and new economic and sociological conditions.

We have in the South two distinct economic and sociological conditions involving tenants and others in the low-income brackets, which will require two distinct methods of attack, and no indications are evident this will be done.

1. The plantation owner operated areas involving the delta, the blackbelt and other fertile areas having the highest percentage of college-trained operators; and yet the highest percent of illiteracy, malnutrition, and disease obtains in these areas among tenants. Since economic and sociological practice involving many tenants can be put into effect by a single contact, and multiplied by group contact, a special technique based on group discussion should be developed or built on past experience. This accounts for the fact that AAA and other conservation practices worth mentioning are now confined to these areas, and no one concerned with land-use planning seems to have recognized this fact which may eventually tend to defeat our entire recovery program. Many plantations boast of increasing yields from 1/2 bale to 1-1/2 bales per acre. This tends to make the production problem more difficult on hill sections where little of the conservation practices are put into effect, because of difficult financing. A casual observation from travel over the South will confirm this observation. On my last trip I traveled across northern Mississippi, northern Alabama, and quite an area of the hill section of Tennessee, and I failed to see any winter legume cover crops. In the delta and blackbelt counties of these States, legume seed purchased is measured in tons.

2. I saw on this trip large agricultural areas, that I have observed change in type during the past 15 years because of a sociological condition that has constantly grown worse. Plantation owners who formerly grew the best of dairy or beef cattle moved to the cities where they could have better school facilities and the comfort of steam heat, electric lights, running water, and better sanitary conditions. They soon discovered they could not trust their livestock to tenants of the better class. When the shift was made to row crops, the land continued to decline in fertility, until now groups of the poorest type of tenant occupy the land. The beautiful homes have continued to decay until in some instances the roof is falling in. The land is often gullied to the stage where only trees will save it from total loss. Large areas of the South have declined to the point where even the tenants have moved out and trees have taken possession. This type of area obviously deserves an entirely different approach, yet it receives the same consideration as others.

It would seem advisable to have economists' time devoted largely to helping other specialists collect economic data to use in advancement of their projects and to show as a basis for program determination under the direction of district agents who have had experience in this work for many years. Most of our economic specialists are young and recently out of college and have had little experience of any kind.

Solution of Problems

In order to cope with some of the above problems from an organization standpoint, it will, in my opinion, be necessary to place full responsibility on a specialist for the latest in AAA soil-conservation practices, and perhaps that of other agencies. These individuals should attend most of the out-of-State meetings now attended by our directors. After making a full report to the director and after consultation, the whole staff should be informed as to the latest plans. They should work closely with each specialist member of the State. Enterprise specialists will in turn use these new practices as a pulling force for their work. They will actually become the source of all subject matter for their enterprise, or other Government agencies will be forced to put on their own specialists.

These new specialists, including land-use planning, should, like all others, in my opinion, function under the direction of the district supervisors who call training meetings for agents. These meetings should be planned in such manner as not to interfere with other work and to save travel expense of all specialists. Some States may need to add to their staff office-management specialists whose duty it will be to train agents and their clerical force in up-to-date methods. It has been obvious that agents with well-managed offices have finished first with duties of other agencies, as well as their own, and have had time to establish and check up demonstrational work in the county, and carry on methods of spreading practices, such as program determination, conferences, field meetings, tours, discussion-group conferences, publicity, circular letters, and the like.

If we are to be in a position to measure the volume of our work as revealed in reports, and are to determine who had an influence in increasing this volume, we must hasten to develop a reporting system that will make such measurement possible, as have all other up-to-date institutions. We have had this on our southern regional programs for several years, but most States have been so busy doing the job that little thought has been given to measurement of our work from actual reported results. I hope to study what we have in my States and get the latest from others preparatory to making recommendations.

My judgment now is, each State should have an organization set-up designed for this purpose, similar to that in North Carolina, the only State I know of where a monthly check is made of facts which are not influenced by guessing.

I shall continue to study methods of developing a type of plan of work that will enable all extension workers to set definite goals and measure their accomplishment in terms of an action program and measured results. We have made good progress, our best example perhaps being the study we made of Negro supervision which has been most valuable. I shall set up a similar plan to measure my own results. I shall study costs and efficiency of educational exhibits and other means and agencies through applied usage and results or volume of business.

I shall be compelled to make several State contacts before I can get my feet on solid ground. I plan to make preliminary inspection in North Carolina, Florida, Alabama, Mississippi, and perhaps Louisiana soon. Two of these States have asked for immediate help. I shall wish to follow this with a trip to Virginia, South Carolina, and Tennessee. I had hoped to make preliminary inspection in all States mentioned; however, I am doubtful if sufficient time is available. I had not planned to go to Puerto Rico this year, but I believe it will be necessary to do some careful budget planning and basic planning of the work there.

When I observed the new organization set-up I felt deep concern as to its proper functioning, and especially as to the service I could render if I were expected to work in regions where this would be impossible because of my ignorance of conditions there relating to agriculture or home economics, or as to budgets designed to meet these problems, or plans of work to solve them. This concern grew when I thought of the fact that my contacts would be so seldom; serving in a Nation-wide capacity, I would know little as to the functioning of the organization serving under the budget.

However, I was happy with my new assignment when I learned I should continue to serve in the region to which I have devoted 25 years in studying the functioning of the organization under conditions I grew up with, and many more years in training for service. I was further gratified to have Mr. Brigham approve my plan of work when I presented it before our regional conferences at Texarkana and Knoxville, and received his and many other's congratulatory remarks regarding it.

DISCUSSION ON LAND-USE PLANNING AND ITS RELATION TO PROGRAM DETERMINATION

H. C. Sanders,
State Agent,
Louisiana

When I first saw this program and noted that I was to have a part in the discussion of this subject, three words particularly stood out. These words were "income" and "this year." "Income" I first interpreted as cash income and "this year" as 1939. At first I thought the subject was suggested by an optimist who believed that certainly there were some ways whereby Southern farmers could increase income in 1939. The more I thought about this, the more I became convinced that the subject was suggested by a pessimist who didn't believe that it could be done and who put three of us "on the spot" to prove it.

There are in every State opportunities for some farmers to increase their cash income in 1939 with specialty crops, livestock, or practices. You are more familiar with those in your State than I am. Southern farmers can make adjustments in the use of their land and labor resources which eventually will give them a better balance and more income. But for farmers as a whole, I am inclined to agree with the pessimist that it can't be done in 1939.

According to our "live-at-home" plan in Louisiana, for a family of five, the food needed for an adequate diet which can be produced on a farm is worth approximately \$553.73. The food needed to complete and supplement this diet can be bought for as little as \$42.88. Last year we had a few farm families (not nearly enough) who kept home accounts. These families used, on the average, \$762 worth of food, producing \$600 worth at home and purchasing food to the extent of \$162. These families are very probably not average families. They more than likely have a higher standard of living and can be expected to make larger purchases of food than the average. However, it does seem that purchasing three times what is considered adequate is buying more than is necessary.

The most significant figures which I have to present are part of the results of a survey made during the summer of last year. We were anxious to compare the opinion of farmers in general with the opinion of the committeemen in answer to question 2-b in the program planning work of 1937. As you remember in question 2-b, these committeemen were asked to give estimates of acreages and livestock numbers after shifts had been made in the use of land so that a system of farming prevailed which would conserve fertility and control erosion. Our idea was to visit not less than 10 percent of the farmers in areas representative of 12 of the 13 types of farming areas in the State. After we received permission to make the survey, we decided we would also get some information about the food and feed production and the needs of these farms, and so in addition to getting the farmer's opinion on the adjustments which he should make on his farm in question 2-b, we asked him and his wife two questions: (1) How much of certain food and feed items was produced on the farm in 1937, and (2) how much of those items would have been needed to supply the farm, and all the tenants.

There were 4,051 farm families visited and schedules taken. We were very careful to impress on the young men who took these schedules the importance of not giving these farmers and their wives any idea of our standard or what is generally considered to be sufficient. We were interested in checking our standard with the opinions of these farmers and their wives. It is interesting to note how closely they agree. (See page 11.)

Several of the discrepancies can be explained, but I will not take the time to do so.

From the statements of their production and their needs we figured deficiencies or surpluses on several of the most important items in the food and feed which could be produced in the area. Figures are given

Expressed needs per family as shown in the survey, compared with dietary requirements set up on Louisiana's Live-at-home Plan for a family of five

Product	What the family says they need	Recommendations in Live-at-Home Plan and Home Garden and Orchard Plans
	<u>Quantity</u>	<u>Quantity</u>
Pork	484 pounds	450 pounds
Beef, or mutton	165 do.	225 do.
Milk (for butter, cheese, beverage)	695 gallons	815 gallons
Poultry	81 chickens	125 chickens for meat 35 hens or pullets for eggs
Eggs	226 dozen	152 dozen
Sirup	23 gallons	20 gallons
Irish potatoes	14 bushels	8 bushels
Sweetpotatoes	77 do.	25 do.
Corn	192 do.	13 do. (meal and grits)
Home gardens	.37 acre	.25 acre
Home orchards	.21 do.	.41 do.

by type of farming areas because there is considerable variation. Let's begin with Area 256-A which covers Beauregard and Vernon parishes. This is a cut-over, pine-woods, open-range area with some cotton, sweet and Irish potatoes, and a small amount of truck farming. It is one of the principal sheep producing parishes of the State and has large numbers of beef cattle. In this area these farm families said that they produced surpluses of:

	<u>Percent</u>		<u>Percent</u>
Pork	13	Milk	1
Beef or mutton	1	Irish potatoes	18
Poultry	34	Sweetpotatoes	28
Eggs	233		

And that they were deficient in:

	<u>Percent</u>		<u>Percent</u>
Sirup	58	Corn	20
Hay	11		

The production of Area 254 which is the Red River delta cotton area, with cotton, some dairying, and livestock as the sources of income is

deficient in all cases except hay, which showed a surplus of 11 percent. For the other items the deficiencies were as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	64	Sirup	57
Beef or mutton	77	Irish potatoes	46
Milk	75	Sweetpotatoes	47
Poultry	63	Corn	8
Eggs	51		

Area 250-b covers the sand hills of the Ouachita Valley. It is territory similar to southern Arkansas and eastern Texas. Cotton is the principal source of income with some dairying and some truck. The area is usually considered to be partly self-sufficing in its agriculture. In this area only one surplus is shown, and this is in milk. Since the schedules were taken in Claiborne Parish where there is considerable dairy development, such a surplus is not surprising. All the other items are deficiencies as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	39	Irish potatoes	51
Beef or mutton	58	Sweetpotatoes	53
Poultry	32	Corn	37
Eggs	17	Hay	63
Sirup	26		

Area 293-c is the brown loam Mississippi bluff area near Baton Rouge. The principal source of income is some cotton with general livestock, dairying, and truck. A large number of people live on the farms of this area and work at the Standard Oil plant at Baton Rouge. This area shows surpluses in milk, sirup, and Irish potatoes, and deficiencies in the other items as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	29	Sweetpotatoes	25
Beef or mutton	29	Corn	26
Poultry	50	Hay	6
Eggs	40		

Area 259-a is the rice area of Louisiana. The principal source of income is rice with some cotton. This is one of the principal beef-cattle sections of the State. Here the surpluses of pork, beef, and milk were apparent, with deficiencies in the other items, as follows:

	<u>Percent</u>		<u>Percent</u>
Poultry	9	Sweetpotatoes	26
Eggs	2	Corn	31
Sirup	58	Hay	6
Irish potatoes	25		

Area 298 is the sugar-bowl of Louisiana. The principal source of income is cane for sugar with some cotton, truck, and livestock. Irish potatoes are also a cash crop of this area which is indicated by the large surplus shown in the schedules. This area also showed a surplus of hay but a deficiency of:

	<u>Percent</u>		<u>Percent</u>
Pork	59	Eggs	34
Beef or mutton	62	Sirup	97
Milk	22	Sweet potatoes	83
Poultry	35	Corn	17

Area 292-b is the Northeast Louisiana Delta Cotton area which covers the alluvial lands of the Ouachita and Mississippi Rivers and the bluff lands of northeast Louisiana. The principal source of income is cotton with some livestock. In this area all items show deficiencies as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	72	Sirup	77
Beef or mutton	98	Irish potatoes	62
Milk	38	Sweetpotatoes	53
Poultry	66	Corn	39
Eggs	63	Hay	43

Area 297 - the principal sweetpotato-producing area of the State - covers the general farming area of central Louisiana. Income is derived from cotton, some cane for sugar and sirup, and livestock and truck. The area shows a surplus of sweet and Irish potatoes with deficiencies in the other items as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	72	Eggs	36
Beef or mutton	62	Sirup	35
Milk	21	Corn	37
Poultry	36	Hay	34

Area 347-a is in extreme southeast Louisiana, bordering on Lake Ponchartrain. The source of income is some dairying, truck, and citrus fruits. It is becoming a suburb of the city of New Orleans. This area shows a large surplus of beef and a small surplus of poultry, but with deficiencies of:

	<u>Percent</u>		<u>Percent</u>
Pork	46	Irish potatoes	125
Milk	12	Sweetpotatoes	27
Eggs	14	Corn	36
Sirup	61	Hay	18

Area 299 is the strawberry area of Louisiana. The principal income is from strawberries, other truck crops, some cotton, and dairying. This area shows a surplus of milk, sirup, and Irish potatoes, but has deficiencies in the other items as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	59	Sweetpotatoes	52
Beef or mutton	94	Corn	53
Poultry	47	Hay	39
Eggs	41		

Area 296 is also in southeast Louisiana, is in the longleaf cut-over, pinelands, with some part-time farming. Some cotton is grown, some dairying, and some truck. This area shows a surplus of Irish potatoes, but there are considerable deficiencies in the other items as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	33	Sweetpotatoes	24
Beef or mutton	90	Corn	11
Milk	12	Hay	49
Poultry	25		

Area 250-c is also in the sand hills of the Ouachita Valley, but the area is usually considered to be more self-sufficing than the remainder of the section. The source of income is some cotton, dairying, and truck. This area shows a surplus of Irish potatoes, but considerable deficiencies in the other items as follows:

	<u>Percent</u>		<u>Percent</u>
Pork	47	Eggs	27
Beef or mutton	79	Sirup	70
Milk	18	Sweetpotatoes	58
Poultry	43	Corn	39
Hay	75		

We think these figures are significant because they are estimates of farmers and farm women. They indicate that farm people themselves realize that they are not producing adequate supplies of food and feed, and they are an indication of the deficiencies in the different areas of our State.

The question of self-sufficiency in the South is older than extension work. I realize that there is nothing new in what I have said, but the picture which I have presented does indicate to extension workers in Louisiana a large field of activity and some adjustments that farmers may make in 1939 which will increase income and improve family living.

LAND-USE PLANNING AS A BASIS FOR PROGRAM DEVELOPMENT

AS RELATED TO AGRONOMY

L. A. Dhonau
District Agent,
Little Rock, Arkansas

County program-planning work started in Arkansas in 1935 in cooperation with the Triple A, and continuing thru 1936, 1937, and 1938, has been very helpful in planning the agronomy program.

Since 1923 we have had the assistance of county agricultural committees and in 1938 these committees were enlarged and, consequently, are more helpful in making the program of work for a given county.

One of the great difficulties in devising a program of work is making the program flexible enough to fit the conditions of the area involved and at the same time set up a definite program with goals that can be measured.

The approach of program planning with the Triple A was made on the type-of-farming-area basis adjusted to fit county lines. The total figures recommended for various type of farming areas in the State make up the figures for the State recommendations. The 1,500 farm men and women, county agents, and members of the faculty of the College of Agriculture assisted in making the recommendations each year that this work was projected. The basis for making the recommendations was in reply to a question "to estimate the probable production of various farm products, assuming normal weather and prospective prices, if farming systems and practices necessary to maintain soil productivity and control erosion were actually adopted." The recommendations of these committees have been very helpful in making the county program of work for the Extension Service throughout the State.

To have a more definite plan it seems necessary to do detailed mapping and classification of the different areas within counties and then make recommendations by these small areas. The land-use planning and mapping work anticipated by the Washington office, to my mind, is merely a refinement of the planning work that we have done in the past and, of course, we sent out definite recommendations for small areas in which we will be able to measure results of our programs. For example, the cotton-improvement program will be benefited very materially, for it will no doubt concentrate the cotton acreage in the more productive areas where a concentrated program for improvement can be more effective.

In the Triple A program administrative areas were set up in certain counties where type of soil, type of farming, and soil productivity differed materially within the county. This approach to planning for different types of farms and different types of soil is a beginning in the right direction for recognizing differences within the counties. This approach

is more nearly in line with farm-management recommendations, and although it is difficult to explain to the masses of people, it is a step in the right direction.

Another piece of work carried on in Arkansas that will contribute considerably to this planning work will be the work done in farm-unit demonstrations. The farm-unit demonstrations have been conducted in practically every county in the State; and in each area of the State the demonstrations on our whole farm basis with the use of triple superphosphate on legume crops have been established. These demonstrations are a result of the contributions made by each specialist in their particular field of work. For example, the agronomy department has made recommendations on these farm-unit demonstrations in regard to all field crops and fertilizer rates that are applied to each field.

Another contribution will be made in areas where we have our soil conservation districts. In these areas, definite crop recommendations have been made, and the results of the various methods of controlling erosion and shifting the use of land from soil-depleting crops to soil-conserving crops are being demonstrated. These demonstrations will be very helpful in carrying out the practices that will be recommended in each area under this land-use program-planning work.

LAND-USE PLANNING AS A BASIS FOR PROGRAM DEVELOPMENT

AS RELATED TO FORESTRY

C. W. Davis,
District Agent,
Louisiana

A program of land use or of extension activities would be incomplete if it failed to provide for the use of forest land or omitted the teaching of improved forestry practices. In Louisiana, the net acreage in forests, amounting to nearly 19 million acres, covers 65 percent of the total land area of the State. The 3.4 million acres of woodland on farms is one-third of the total land in farms and nearly as much as the cropland harvested.

The time has passed when the approach to a sound forestry program is based solely on conservation. Exploitation of the timber resources of the State reached a peak about the time of the World War, and the annual cut has been on a decline for the past two decades. The only large areas of virgin timber left in the State are the Singer tract of hardwood in Madison Parish and a few scattered tracts of pine in the central part of the State.

The production of timber reserves for future generations is admitted by all to be a worthy goal, but few private owners are or can afford to be so altruistic as to base a program on this premise.

Present and future programs of land use as related to forestry must be on the concept of the tree as a cash crop, to be produced, harvested, and marketed for profit, just as is the case with annual crops on farm land. Forest trees must compete with farm crops for the use of the land, with the more fertile agricultural lands gradually being cleared of timber and prepared for the plow and with the unprofitable agricultural sections or portions of farms reverting back to timber, aided and abetted by man's intelligence, and based on a planned program of sound land use.

The wisdom of this policy is clearly illustrated by natural trends and population shifts in the history of the settlement of North and Central Louisiana. Early settlers from the southeastern States passed through the fertile alluvial lands of the Mississippi Valley to settle the pine uplands of the State. The timber was destroyed for farm lands and for sawlogs. After a few generations of continuous cropping and erosion, many of these farms have become so impoverished that they have been abandoned to the old field pine or are submarginal in production. In the meantime the alluvial lands of the Mississippi and the Red Rivers have been protected from floods; roads have been built into the back country, and the large sawmill operators are putting their cut-over hardwood timberland on the market. Farmers from the upland areas are flocking to these regions by the thousands. Thriving rural communities, farm-to-market roads, and consolidated high schools are now found in localities where the old-timers hunted the wolf and the deer 15 to 20 years ago. Our program of land use should aid and accentuate this practical, common-sense trend or population shift.

While the hardwood tree cannot successfully compete with farm crops in the well-drained alluvial area, it is equally true that farm crops cannot profitably compete with pine trees on much of the upland area. After 5 years' experience in erosion control in the State, the Soil Conservation Service now considers a 10 percent slope as being the maximum for cultivated land; and this agency is pursuing the policy of prevailing on the landowner to put the steeper slopes in timber.

That there is much marginal land in the State which should be shifted from cropland to forests is evidenced by the Bureau of Census average yields of cotton and corn. Twenty-six of the 50 cotton parishes of the State have an average yield of less than 200 pounds of lint per acre for the 5-year period, 1933-37. The lowest parish in this group has a yield of 151 pounds per acre in a State where the highest yield (on alluvial land) is 406 pounds per acre. No AAA program of production control and Federal subsidies can make farming profitable in an area where the gross return from the cash crop is less than \$15 an acre. Six of the 64 parishes of the State have a corn yield of 10 bushels or less per acre for the 10-year period 1923-32, and 38 parishes have a yield of 15 bushels or less. The lowest corn yield in the State is 8.5 bushels and the top-ranking parish has an average yield of 26.5

bushels. Even subsistence farming is carried on under a great handicap in areas where the production of the major food and feed crops is only 10 bushels per acre.

Can timber be made a profitable cash crop on the farm woodlands, the steep slopes, and the submarginal agricultural areas? The net growth of timber per acre and the net income are dependent on such factors as location, kind and stand of timber, care of the woodland, current market price, accessibility to market, and use to be made of the product. The U. S. Forest Service surveys of selected areas in South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas indicate a net growth of one-third cords per acre annually for the Southern States. Under good forestry management this may be increased to a cord per acre. Expressed as lumber, a growth of 500 board feet per acre annually is conservative. If planted to black locust, an acre will produce 2,500 posts in 8 years. The net income per acre which may be expected from forests in Louisiana has been variously estimated as follows:

(1) \$2.32 from measurements of growth of farm woodlands in Union Parish made by U. S. Forestry Service.

(2) \$3 per acre cut from a 100,000 acre managed tract by U. S. Forestry Service.

(3) \$2.50 per acre from cutting records made by the Louisiana Extension Forester throughout the State.

In considering the potential income from forest lands, the grazing possibilities should not be overlooked. Records of the McNeil, Miss., Experiment Station show that cutover uplands which are being reforested have a carrying capacity of 12 acres per cow for 8 months. When the woodland range is improved by sowing adapted grasses, the carrying capacity is increased to 6 or 7 acres per cow for 8 months. In this experiment lespedeza and carpet grass were sowed in the open areas. A range-cattle project in cutover lands requires winter feeding for 4 months. One-half ton of hulls (\$4) and 250 pounds of cottonseed cake (\$3) cost \$7 at present average wholesale prices in Louisiana. From 300 to 400 pounds of beef per animal unit, at the current value of \$20 to \$25, are the returns which are being obtained where good range-herd practices are being followed.

The present handicap to a combined program of reforestation and range cattle in Louisiana is that the vast tracts of cut-over forests are owned by one group, and the cattle are owned by another group, who prefer to have the range lands in grass rather than in trees. Reports of the U. S. Forest Service show that 61 percent of the 4,594 forest fires in Louisiana in 1936 were of incendiary origin.

Labor employment is another factor which should be borne in mind in considering a program for forest lands. The Department of Labor records show that more people are employed in cutting and assembling forestry

products to the processing plants than in any other industry in Louisiana. Present wages on a piece-work basis are: 70 cents to \$1 per cord for cutting wood; \$1 to \$1.10 per M bd. ft. for cutting logs; \$1 per M for assembling logs; \$3 to \$5 per M for hauling logs to the mill; and 5 cents each to cut and peel fence posts.

State and county Governments should be interested in a planned program of forestry to check the loss in revenue from declining assessments. The records of the State Tax Commission show an assessed value of the timberlands in St. Tammany Parish, La., as \$5,554,854 in 1921. By 1930 this had declined to \$4,137,580, and by 1937 to \$1,706,075. Incidentally this is a matter of concern to the extension agent who is dependent on local appropriating bodies for a portion of his salary. The status of the program of public ownership and forestry improvement which is under way on the 19 million acres of woodland may be summarized as follows:

The Forestry Service has acquired 877,000 acres in the Kisatchie National Forest in six parishes in central Louisiana. This land has been purchased at an average cost of \$2.75 per acre. Prices on individual tracts have ranged from \$1.44 to \$4.21 per acre.

The Soil Conservation Service has a purchase project of 35,000 acres in north Louisiana. This land was originally acquired by the Bureau of Agricultural Engineering and recently shifted to Soil Conservation Service. No definite program of land use has as yet been worked out for this project.

The State forest contains 6,000 acres. In addition, the State holds title to 1,615,000 acres equally divided between the Levee Board and tax adjudications. There are 6,492,000 acres of privately owned forest land under a State program. This program consists of fire protection and reforestation with the seed-tree method and some new plantings.

Planned programs of land use may wish to differentiate between public and private ownership of forest lands. Private owners will carry out recommended forestry practices if they can be convinced that a profit will accrue within a relatively short period of time. Where private ownership is failing to meet the situation, the State and Federal Governments should acquire title to the land and institute a sound forestry program.

The forestry practices which are being advocated by the Louisiana Extension Department include the following projects:

- (1) Planting windbreaks in the prairie section.
- (2) Thinning for stand improvement.
- (3) Planting and cultivating for post material.
- (4) Planting for farm forestry with seedling trees procured from the Clark-McNary Cooperative State Nursery at a cost of \$1.50 to \$2 per 1,000.
- (5) Marketing. This project includes selection of trees to be marketed and finding the best market available.

An effort is being made to get the first thinnings marketed as pulpwood and firewood; the second thinnings as poles, and the selected sawlogs sold on a board-foot basis. Where this is possible the forest lands yield a constant annual revenue and the destructive clean-cut is avoided. The policy of the annual harvest versus the clean-cut, coupled with fire control, has been followed by the Hardtner at Urania, La., since 1896, and there is no end in sight for their operations unless the public burns or overtaxes their woods. The town of Urania is permanent with both employment and social opportunities available for its citizens. By contrast the towns of Standard, Selma, and Pollock are ghost communities in the same section of the State. The mills which operated in these communities did not have the long-time vision which was shown by the Urania operators. "The Deserted Village" is a common sight in the cut-over pine areas of Louisiana.

Sound planning and aggressive action are needed to restore the forest lands to their maximum possibilities as a source of revenue and employment. If the agencies of the State and Federal Governments are sincere in their expressed desire for a coordinated program, and if planning work is done intelligently and fearlessly by the land-use planning committees, the forest lands of the South can be restored to their rightful place in the economic life of the Nation.

LAND-USE PLANNING AS A BASIS FOR PROGRAM DEVELOPMENT AS RELATED TO FARM MANAGEMENT

(Outline of Remarks)

W. E. Morgan

Extension Economist in Agricultural Planning

The subject assigned to me has two interpretations. The first is land-use planning as a basis for developing a program of work to be carried on by a farm-management specialist. The second is land-use planning as a basis for what might be called farm-management analysis on an individual farm.

Since I am not the farm-management specialist in the Texas Extension Service, I naturally assumed that I should apply major emphasis to the latter interpretation in making my talk. However, Mr. Chambers has informed me that my remarks should deal with land-use planning as a basis for developing a program of work to be carried on by an extension specialist in farm management.

To begin with, we need some clarification on just what land-use planning is supposed to do. Its objective, as I see it, is the making of such adjustments in land use and in farm organization as may be necessary to effect wise utilization of resources, both natural and human. Right

away I find myself in difficulty by presuming that "wise use" is something that fallible human beings can determine with infallibility. Without digressing to argue this assumption, I am going to presume that wise use can be determined not with finality, as would a mathematical equation, but with practical certainty within the ever-prevalent limits of human intelligence.

Land-use planning results in action or adjustment. If adjustments are to be made intelligently, the ones who make them ought to have a good idea of what they are working with. In terms of land-use planning, this means that there should be assembled at the outset a large body of what might be called inventory information. This would include a knowledge of the different types of soil, their extent, and their location. This should also include information on the characteristics, capacity, and limitations of these soils, and, in addition, it should include detailed information on present farm organization. This thing gets to be a rather complicated statistical analysis, and I could list indefinitely items and subitems that should be enumerated. To sum it up, however, there should be available a statement and understanding of the physical, economic, and social factors influencing land use. When inventory information such as this is assembled and interpreted in the light of existing problems that farmers must cope with, some indication of the nature and extent of needed adjustments should show up when farmers and agricultural workers mull over these problems.

I have attempted to review the major premises on which we base the land-use planning work we are doing in Texas. What has all this to do with the subject assigned to me for discussion.

With respect to the first interpretation placed on my subject, it is evident that the farm-management specialist's job is cut out for him when such inventory information is assembled. In Texas our farm management specialist is in charge of the whole farm demonstration work. Would not the assembling of information as I have outlined give this specialist the proper setting for whole farm demonstration work? Specifically, it would orient the demonstration not only with respect to location in the community but with respect to the type of farm which would make the best kind of demonstration.

Our farm-management specialist also is working on farm records and tenure agreements. With respect to the former, the assembling of land-use planning inventory material would indicate the classifications into which groups of records should be assembled if interpretations of the record information are to be sound. Records for a large number of farms must be obtained to lend stability to conclusions drawn from the data. Stability of conclusions is essential, but the conclusions still have limited usefulness if the records from which they are drawn are from farms which vary widely with respect to the kind and quality of land.

There is no question about the necessity in Texas for improvement in tenure agreements. We should not "kid" ourselves, however, into believing that a revised tenure agreement will solve agricultural problems that have been 50 years in the making and that may be related only incidentally to

tenure agreements themselves. There is yet to be devised a tenure agreement that will satisfy either the landlord or the tenant when the farm simply does not have the resources to make a decent living for the operator. Among other things, land-use planning should develop information that can be used to determine the minimum resources that an operator should have on a given kind of land. From our experience in Texas, we believe that in many cases substantial revision in existing systems of tenure will promote desirable adjustments in type of farming and size of farm, but it is clear that there is need for an adjustment in farm organization more fundamental than the drawing up of a modern tenure agreement. As in the case of the whole farm demonstration and farm records, land-use planning should help the extension farm-management specialist to orient his program on demonstrations of new tenure agreements.

LAND-USE PLANNING AS A BASIS FOR DEVELOPING PROGRAMS RELATED TO
FARM FAMILY LIVING

Jennie Camp,
Extension Specialist in Home Production Planning
Texas Agricultural and Mechanical College

Land on farms and ranches will produce food for home use, and for many years to come we of rural America are going to have to depend on it as our main source of sustenance even though hydroponics have come into the picture.

The United States Department of Agriculture has since 1933 been taking much land on farms and ranches out of cash crops. Statistics indicate that there are a lot of people that aren't getting enough food. Texas has about $1\frac{1}{2}$ million farm and ranch people living on third- and fourth-rate diets, to say nothing of city people.

Statistics indicate that there really isn't enough food in the land for all the people to have a liberal diet. The Bureau of Home Economics at the 1937 Outlook Conference stated that if diets of all city people were raised to a first-class level, it would take one-sixth more eggs, one-third more milk, one-fifth more fruits, and one-fifth more vegetables. This statement is in line with figures released in 1934 by AAA showing that 41,000,000 more acres would have to be put in food and feed if all the people had a liberal diet.

There are in some areas great handicaps to producing food, but when farm and ranch people and experiment station and extension workers bend their energies to it, they develop devices, practices, varieties that somewhat overcome handicaps.

People need food! There's land for it! There are ways of growing a lot of food on farms and ranches in most areas even under adverse circumstances.

Therefore, in land-use planning it seems to me that the technicians, economists, agricultural and home economics subject matter specialists, administrative representatives of Federal agricultural agencies, farm and ranch men and women should make inventories and set up preliminary or permanent recommendations for land use--whether in a small area within a county, or a whole county, or a whole type of farming area - or a whole State - or the Nation as a whole - that recommendations for the use of land for growing food and feed for home use by the individual farm and ranch family are a prominent part of every report released.

Following that, it is, I think, the business of the agricultural and home economics subject matter specialists of the experiment stations and the extension services, and the farm and ranch men and women to investigate and develop devices, practices, varieties that will result in a somewhat satisfactory program of producing food and feed on individual farms and ranches. We can develop some varieties of fruits and vegetables, of feed crops of pasture grasses adapted to an area. We can develop irrigation systems. We can develop some garden devices and practices that will do much of the job of overcoming many of the handicaps of the area.

It is wise land use in Texas, it seems to me, for the acres it would take to grow the food and feed needed on a farm or ranch to be used that way, since few crops will yield as high money value. The foods listed in the Texas Food Standard totals for one person 2,135 pounds. That's more than a ton. For five people it is 5-1/3 tons. If you bought a year's supply in the grocery store, it would cost \$500 to \$600 which means a value per ton of around \$100 to the rural family. How many crops can Texas grow that have a money value for the farmer of \$100 per ton? Cottonseed in 1938 was \$20 per ton; citrus, \$10; corn, \$10 and less; wheat, around \$10.

From an acreage standpoint the returns are good, too. In most sections of Texas 25 acres will provide all the feed for the livestock, all the vegetables, all the fruits needed. That's \$500 to \$600 worth. That's \$20 to \$25 per acre.

And now to the second part of my remarks.

People must live on the land. Their habitation--the things that make it attractive and comfortable must be put on the land. The places where they wander for recreation and for communion with themselves, and with Nature, and with God are on the land. If space is stinted, our recreation may not re-create - our communion with ourselves and with Nature, and with God may be stinted, too. Let's have spacious areas for the homestead, and for service. Let's use plenty of land for grass and other cover crops adjacent to the home to reduce dust, and mud, and glare, and heat. It may be in lawns, playgrounds, pastures, and hay or forage crops. Let's have trees that give shade to the house, the livestock, the poultry; that provide windbreaks

for house, garden, orchard, livestock. Let's have recreation areas for outdoor games, picnics, fishing and hunting, and swimming.

As we plan for the use of the land, let's use as technicians, agricultural and home economics subject matter specialists, administrative officers of Federal agricultural agencies, farm and ranch men and women, see that (1) as inventories are taken, and (2) preliminary and permanent recommendations for land use are made, that there is space for the farm and home buildings; that land for grass and cover crops and pastures is set aside; that there is land for trees according to the region; that land is provided for recreation areas; that the use of land for all these is a part of every recommendation and report.

These will add comfort to the home. They will make life in the rural home more pleasant and desirable - in all more secure.

And after the foregoing adjustments are recommended it is up to the agricultural and home economics specialists and administrative officers and farm and ranch men and women to develop programs and plans that will get good buildings; get them well arranged; get spacious grassy areas, and trees and woods.

And now to the third point in my remarks.

To get food produced is the job of all of us; and to get it consumed in line with good nutritional standards is the job of all of us, men, women, boys and girls, administrative officers, economists, subject matter specialists.

To get land to dwell on used in the right way is the job of all of us - men, women, boys and girls, administrative officers, economists, subject matter specialists.

Developing programs and plans, and executing plans together will mean some changes. It will mean that women and men will have to break some traditions. Women will have to quit assuming that programs on cotton improvement or livestock production will not be interesting to them; and men will have to quit assuming that women are not interested in such. Inventories will need to be made by all of us men and women. Plans will need to be made by women and men together. Training that will influence the use of food will need to go hand in hand with training influencing the production of food, and at the same meetings. And training in both will need to be given to men, women, boys and girls. All of us, men, women, boys, and girls will have to be concerned with developing the dreams we dwell on in the right way; and in preserving spaces to wander in.

And if real thought is given by all of us to taking inventories, to making recommendations and plans related to farm family living, to executing those plans, progress of a fine kind will, I believe, be made towards achieving (1) parity income for farm people, (2) towards providing an

abundance of food for all the people, (3) towards conservation of the natural and human resources of the Nation. These are three fundamental principles of the agricultural policy of the present administration.

CORRELATING THE ACTIVITIES OF THE EXTENSION SERVICE

Mildred Horton

Vice Director and State Home Demonstration Agent
Texas

Sometimes when I attend such a meeting as this for a day or two I ask myself the question, "Why are we here?" My answer is that somebody believes that we can aid in diffusing useful and practical information in agriculture and home economics and that we will encourage the application of the same. We are here because somebody believes that we can aid farm and ranch people in readjusting agriculture and reconstructing country life - that we can help rural people "to develop a sense of dignity and a sense of the worth-whileness of their efforts." Important as it is that somebody believe that we can do these things, it is even more important that we ourselves believe that we can: that we believe in the worth-whileness of our work; that we believe in farm and ranch people and in their ability to readjust agriculture and reconstruct country life.

In thinking of my subject, Correlating the Activities of the Extension Service, I realize that the work of the farm and ranch family has always been more or less correlated. In the production of food, for example, the men and the boys, the women and the girls all usually work together in the garden and in the orchard. They work together in caring for the poultry flock and in the production of wholesome milk. After the food is produced, the preparation for table use or preservation for future use is primarily the work of the women and girls, but again its consumption becomes a family activity. The same is true from the standpoint of the production of cash. While the men of the family are largely responsible for the cash income, the women are largely responsible for its expenditure. The results of the expenditure are shared and enjoyed by the whole family.

Even though the Extension Service may present separate demonstrations or individual plans, the family members usually get together, plan the work, and make it a correlated family activity. Few bedrooms or kitchens are improved by the women and girls alone. Few yards are landscaped without the aid of the menfolk. Few trench silos are dug and filled until after a family conference. So it is important that the Extension Service consider correlating its activities and presenting a unified family program which meets the needs, the interests, and the abilities of the family.

The Extension Service is making rapid strides in correlating its activities. One of the first big steps taken in Texas in this direction was the whole-farm or whole-ranch demonstration. For many years we have aided farm men, women, boys, and girls in establishing single demonstrations of better farming and homemaking. Such demonstrations have been of benefit to the family and have served as patterns of information and sources of inspiration to the neighbors. Although whole families have worked on these single demonstrations, it was just 3 years ago that the Extension Service made a united effort to tie together or to mold into one these many demonstrations. In this demonstration are included every member of the family, all county agricultural and home demonstration agents, all extension specialists, and all supervisors. In other words, the whole farm or ranch demonstration includes all farm or ranch activities and interests - the land, the home, and the family.

The purpose of the whole-farm or whole-ranch demonstration naturally is twofold. It aims to increase the family income and to improve the family standard of life. Two specialists work closely together in the development of the fundamental principles of farm and home management and together give assistance to the county extension agents. When the two district agents are present at such meetings with the two specialists and the two agents, the set-up is ideal. Following the same plan, the two county extension agents meet in the home and on the farm with the family, to make plans for the improvement of the land, the home, and the people. Believing that happiness is not a matter of things but that it is a matter of feeling, of the sense of progress that we are getting somewhere and accomplishing something, simple, easily accomplished plans must be made first. As these are accomplished and self-confidence is developed, more difficult and long-time plans may be made and undertaken. Family dreams are dreamed and sometimes accomplished much more quickly and much more easily than at first believed.

Agricultural land-use planning is a more recent activity of the Extension Service which is having a correlating influence. While the purpose of land-use planning is to procure recommendations on proper land use from farm men and women and to coordinate the activities of all Government agencies working with farmers, it is serving as a strong force toward correlating the activities of the Extension Service. As farm men and women analyze their situations and needs, and make recommendations for sound land use, they are giving to the Extension Service and other agencies a basis for sounder and more fundamental programs. Land-use planning from an extension and family standpoint is a joint responsibility and opportunity.

The Texas food campaign of 1939 is another activity in which all hands of the Extension Service have been joined in a correlated way. All the members of this organization are joining hands with farm and ranch men and women, and boys and girls, in campaigning during 1939 for more food and feed for home use. Texas farm and ranch families need more food. Lots of them do not eat enough of the kinds necessary for growth, health, and efficiency. Some statistics indicate that around one and one-half million of Texas' 2,290,000 farm and ranch people are living on third- and fourth-rate diets. There is plenty of land, on one hand. There are hungry people or people who

need food, on the other hand. In between these two situations is the Extension Service organization. It has the information that will aid in bringing them together, that will help the farm people overcome handicaps and that will help them make an abundance of food for every farm and ranch family interested and willing to make the effort.

Believing that the first step toward having the right food is to know what the right food is, the Texas food standard has been prepared in popular style and size. It fits the man's pocket and the woman's purse. It tells us what we need for a safe diet daily and for 365 days. A little figuring on this diet indicates that every person consumes about a ton of food each year; that a family of five consumes 5 tons, estimated conservatively at \$500 a year. From a money standpoint as well as from a health standpoint gardens and orchards, chickens and cows, and meat animals are an asset to every farm and ranch family.

As a part of the food campaign, new leaflets known as the Starring Series are being published in Texas. They are different, they are brief, they are timely, and they are taking well over all the State. The general pattern calls for something on the nutritional value, something on how to produce or purchase the food, something on its preservation or storage and some "make-you-want-to-cook" recipes. All specialists whose work deals with the production, preservation, and preparation of food have a part in these publications. To date, Sweetpotatoes, Winter Greens, and Citrus Gold have been presented. Producing Beef for Home Use, and Keeping the Family Cow on the Job, which publications are slightly different but a part of the series, are very popular. Starring Beef is in the broiler now. And Starring Milk, Starring Eggs, Starring Lamb, and Starring Tomatoes will make their appearance soon. The food campaign is another correlated activity of the Extension Service and Texas farm and ranch families.

District meetings held in each district every 2 months by the district agents for all county agricultural and home demonstration agents have been one of the means for correlating the activities of the Extension Service. Last year as for several years, the Texas Extension Service had the problem which results from the county extension agents being called from their counties often and many times rather suddenly. They were called to other counties for meetings on subjects somewhat of an emergency nature. At least it was felt by the supervisors that the information had to be given the agents more quickly than could be given through individual visits to the counties. So in an effort to meet this situation, district meetings were planned for every 2 months in each district. The dates were set, and although the meetings were not compulsory, encouragement for holding them was given by the administrative officers. Although this plan did not entirely solve the problem, since some special meetings still had to be called on short notice occasionally, it is believed that the results have justified the plan. Many district agents requested that the plan be continued for 1939. Such meetings give the district agents an opportunity to present jointly to all county extension agents matters of joint interest. They give the county extension agents an opportunity to present joint problems and joint results of county work. Much still needs to be done toward giving the agents more

opportunity for participation on these district meeting programs, and district agents recognizing this need are making their plans accordingly. These meetings serve as a unifying force for the county extension agents in the counties; they serve as a unifying force for the district agents and for the solution of district problems; they serve as a unifying force between the headquarters staff and the field force. We believe that these district meetings constitute one of our most important means in correlating the activities of the Extension Service.

In conclusion, I believe "We Go Forward" in proportion to our belief in our jobs, to our belief in ourselves, to our belief in the people with whom we work and the work they are doing; in proportion to our first-hand knowledge of farm people, their interests, their needs, their abilities, and their ambitions.

THE PLACE OF THE FARM AND HOME UNIT DEMONSTRATION IN LAND-USE PLANNING AND PROGRAM DEVELOPMENT

D. A. Adams, County Agent,
Young County, Texas

In this discussion I shall attempt to give you some idea as to how the home demonstration agent and I, in 3 years' work in land-use planning, have changed the place of the farm and home unit in planning work and its development in the program outlined.

We realize the county-side land-use planning offers the county extension agents an opportunity to better analyze the problems existing and better apply demonstrations necessary to solve these problems if they are conducted on an all-farm basis for any given soil-type area; and not piecemeal; that is, the livestock demonstration here and improved cotton demonstration there, or an improved pantry demonstration somewhere else as has been done heretofore. It is necessary to rely on individual demonstrations to assist the farm family in individual problems; but in executing a program outlined in land-use planning work, it is important to depend on the whole farm demonstration to get the best results.

We now know that recommendations for a successful farm and home unit demonstration must conform to the recommendations that have been made by local land-use committees and use of outlook material provided by the United States Department of Agriculture as they apply to these demonstrations. The outlook material is to be used in making what changes are necessary in the balancing of various crops and livestock units from time to time.

We have always known that, after all, the farm home is the basis of community life; and community life, the basis of county life which could not exist any more than a wagon wheel could function properly without an

axle, for no matter how good the hub, spokes, or rim of the wheel, it would be useless without an axle. So it is in land-use planning work, for unless the whole farm home is placed on a demonstration basis and the demonstrations recommended are suited to the given soil-type area in the development of the program, we shall find that land-use planning work is very much like the wagon wheel without an axle; that is, it will be of little value in these times of economic readjustment.

I believe if we will list the aims of any all-farm demonstration that we shall find that these same aims will apply to wise land-use planning work, and will find further that, in the development of demonstrations for the program outlined, the whole farm demonstration offers the best opportunity for a solution of the problems. In checking these aims we find, first, that they aim to develop a practical system of management which will provide a sufficient income to insure a comfortable living and lead toward economic security of the farm family and community life through the wise use of land, well-balanced cropping system, control of erosion, and correction of soil deficiencies. Further, that the conservation of water is necessary in a large area of Texas to produce crops for food and feed purposes for the farm family, as well as good crop yields; and the conservation of property, through its intelligent use and care.

Secondly, that they both aim toward the development of an efficient farm and home program to furnish better health, comfort, cultural, and financial advancement through the conservation of human effort by use of labor-saving devices, the conservation of health through a better balanced farm food plan, and a better clothing and sanitation program.

The third aim is to be able to pass on to posterity a better farm home, community, and county than have been our heritage.

For a number of years we have been attempting to lay the foundation for efficient farm planning through the demonstration but have found the trouble was that until the past 3 years we had not begun to concentrate demonstrations on an all-farm basis. We have carried many demonstrations through to a successful conclusion through the efforts of individual demonstrators and community organizations, based primarily on increase in production, but now we must also consider the economic problems of the conservation of resources for a better family and community life, particularly those of getting proper balances in crop production, food production, livestock production, soil conservation, and how each affected the farm family as a whole in any given area. So in turning from one system of conducting the demonstration to another, it was necessary in Young County to make inventories through land-use planning work to discover our problems, particularly as they existed in relation to the farm family in given soil-type areas. The first efforts we made were very indefinite, and many mistakes were made. That I can better place the problem before you as it exists in my county I should like at this time to give a brief summary of the planning work done and point out the mistakes made so that we can better bring to you the picture as to how we are now beginning to use more extensively the whole farm demonstration in the execution of the program developed through

local land-use committees in the various soil-type areas, and in addition, possibly help someone else to avoid our mistakes and thus accomplish much more in the same length of time than we have accomplished. And I should like to mention in passing that time plays an important role in land-use planning due to the fact the farmers will be slow in grasping or hesitant to grasp what you are driving at and are wanting to do.

The first year any planning work was done in Young County on a comprehensive basis was in 1936, at which time the county program-planning committee, which had been selected by the agricultural council and home demonstration council, conducted educational meetings in the various communities throughout the county, giving farmers the economic background of agricultural conditions as they existed at that time. Then in order to find out what changes might be necessary to adapt a revised agricultural program to Young County farms, farmers were asked their opinion on just what the total acreages for the county should be for the crops, this being done on an estimated percentage basis up or down from the figures given them. The county planning committee at the conclusion of this work prepared a set of county figures for the various crops by weighting the average percentages arrived at in the various community meetings. At the conclusion of the year's work we soon found that we had not accomplished too much in determining what better farming practices would be for Young County, but we did accomplish the fact that we had begun to teach people how to begin to think rather than what to think about some of the existing problems, and to begin to think of a cropping system that would be more profitable in connection with the various phases of soil-conservation work.

The mistakes made were that we were applying the estimates of farmers in various communities to a more or less fictitious average farm of a county-wide nature and dealing with county totals only, and we did not realize that the farmer might have some idea as to how these were to apply to his own farm; and in addition we were overlooking livestock units, the farm food plan, and the effect all this might have on the farm family.

So in 1927 the county planning committee decided to spend more time getting farmers to think more of their individual farm and its problems, and in addition to cropping systems we went into the livestock units and some further into the farm family food supply. In educational meetings this year farm data sheets for individual farms were given the farmer so that he could give us a picture of his problems as they existed on his farm and his suggested changes in the farming operations for it in light of existing economic conditions. The result of these educational meetings was that in the final analysis we took a random sample of the data sheets turned in from the entire county and from the average obtained from them set up a county average farm to show how it existed at that time and what changes should be made based upon the recommendations given by the farmer in the data sheets. After we had completed the county average farm it was used as a basis to determine what the county total figures should be in regard to the various crops, livestock units, and family food supply. This program was a much better one in that the program went much closer to the farm home because data sheets were filled out in the home and that it represented more

individual thought of the farmer and his family, yet all of this thought lost its identity when the county planning committee set up as an example a county average farm. Another mistake made was the fact that we used a random sample from too widely a scattered area to set up a county plan of work for an individual farm that would fit all portions of this county. In educational meetings later we found, too, that we had overlooked the importance of soil-type areas and their effects on farming set-ups and the farm family.

So in 1938, using the experience gained and profiting by the mistakes made in 1936 and 1937, we attempted to work out a more satisfactory program based on soil types and the farm home. It was decided by the home demonstration council and agricultural council rather than go to the field for large group meetings, that the work would be done in the county office with the representative committees from the various soil-type areas, and that this group of committees was to serve as our county land-use planning committee. Profiting by the experience gained before, we as agents found we had much work to do in order to begin building a much more satisfactory land-use program. Our first step was to divide the county into preliminary soil-type areas and, in addition, we had to find out what the existing farm-crop systems were within the various areas, what the yields of the crops were, and what the livestock units were. So, in order to get this information, a close study was made of AAA records, both farm and ranch. We also had to know something of what had been going on on a long-time basis, and here we studied the census figures; and probably one of the most interesting things that was discovered was in a tabulation on the trends of crop acreages for the past 30 years in Young County. It was interesting to note that in every 10 years there was a complete reversal in the acreage planted to cotton and small grains. In 1910, 1920, and 1930 the small-grain acreage was at its peak, while in 1915, 1925, and 1935 cotton acreage was at its peak. It seemed to us that one of our problems was that of finding out why this existed. The county committee, upon being called to the county office, was presented with all this material and they, realizing the mistake made 2 years prior to this, began their work and first divided the county into definite soil-type areas. The preliminary map prepared by the agents was gone over thoroughly, and the final result was that in the opinion of the 15 men and women present there should be six areas instead of the original four suggested. After the soil-type areas had been established, the county committee was divided into subcommittees whose membership came from the respective areas. Each subcommittee was then given the results of the previous 2 years' work, also their copies of the information of cropping systems as they applied to their soil-type areas only. With this information at hand, they began to prepare and set-up, what would be an economic-sized farming unit, one that would fit a family-sized farm or ranch, and that could be operated with modern equipment in such manner as to maintain soil fertility, prevent soil erosion and whose organization of enterprises would provide a satisfactory standard of living for the farm family. The interesting thing at this point was the interest which various committees took due to the fact that they were actually setting up a farm unit for a farm family and one that must provide the very things that we as extension people had been trying to teach through the demonstration way for a long time. Wise land-use planning was being built

around the farm family in a soil-type area in which common problems existed. At the completion of the work of the subcommittees, we found that instead of having one average farm for the whole county, we had farms for six soil-type areas with common problems, and that each was different from the other, and was built around the farm family. In addition, they carried very definite recommendations as to size, acreage of the various crops, size of livestock unit and soil-conservation practices, garden for home food supply, and feed storage facilities.

In order that you might see that recommendations made by local land-use committees should be developed on an all-farm basis I want at this time to give you an example of the definite recommendations made in one of our soil-type areas. I shall select Area No. 2, and the soil type in this area is of the interior prairie group and is gray to light-brown loam. The economic size family unit set up consists of a total of 320 acres of land with 145 acres in pasture land, 5 acres in farmstead, including orchard and garden, and a total of 170 acres of cropland. This amount of cropland would not vary materially from the existing acreages in that area, but the balance in the acreages of the various farm crops varied considerably as to the way they existed at that time, there being more wheat grown than cotton, and not enough foodstuff. In addition to this variation, we find a very strong recommendation for a revision and increase in the livestock unit. The recommended cotton acreage to be planted was 60 acres, while at the same time the recommended wheat acreage was 60 acres, with a special provision that these acreages be interchangeable between 50 and 70 acres, depending on moisture conditions, and particularly upon the outlook from year to year for the above-mentioned crops. Corn acreage recommended was 5, grain sorghum, 5 acres; sorghum for hay, 5 acres; and 35 acres of oats to be harvested. The recommended livestock unit to go with this farm set-up was as follows: 2 brood mares, 6 beef cows, 4 dairy cows (with the last 2 interchangeable to suit the farm), 1 brood sow, 19 ewes, 1 ram, 75 hens, and 3 turkey hens with 1 tom. The conservation practices recommended were that all land be terraced where the slope justified, and that all unterraced land be contour tilled. Legumes should be interplanted with grain sorghum and turned under as green manure. Rotation recommended was cotton, wheat, row crops, and oats, one following the other. Pasture improvement recommended was contour ridging, eradication, of mesquite and prickly pear. The power unit recommended was a medium-sized tractor. The committee estimated that cotton yields should be raised 20 pounds to the acre, that corn yields should be raised, at least, 2 bushels per acre, grain sorghum at least 2 bushels per acre, that hay yields should be increased one-half ton per acre, that oat yields should be raised at least 4 bushels per acre, and that wheat yields should be raised 2 bushels per acre. The reason I have gone into detail on this farming set-up is to show that we as extension workers have a wonderful opportunity to use the whole farm in developing the recommendations made by land-use committees. Knowing this area as I do and each of the above-mentioned crops, there is a very definite demonstration that should be conducted on that farm; that is, increase in production and quality of the various crops through the use of legumes and rotation practices. In the livestock unit, we have a very definite challenge in that the entire unit must be reorganized to fit this set-up and in most cases added to the existing unit to bring it

up to the recommendations, and, in addition, organization of cooperative community circles for purebred sires. When this is done, the agents will have some six or eight adult demonstrations that need to be conducted on this farm. Even if we stopped here, the all-farm demonstration would be the place where we as extension agents should combine all these demonstrations to show the rest of the soil-type area that the recommendations made by land-use committees will provide a satisfactory standard of living.

In the discussion meetings and other educational meetings held in regard to the work done in 1938, we soon found that we had still not gone far enough in planning work. Criticisms offered were that we should go a step farther into the farm home and make definite recommendations as to farm food-supply plans, recommendations as to better systems of record keeping, and definite plans of individual development for each member of the farm family. Since these suggestions have been brought out in 1938 in educational meetings held within the soil-type areas, local land-use committees have been elected for 1939 with the idea of revising the work already done in regard to farm activities, and if necessary, supplementing it with the above recommendations before taking the entire land-use program to the farmer and his family. We believe that final approval of the land-use plan adopted should come from the farm home itself to the local land-use committee, and then to the county committee rather than from the county committee and sub-committees to the farm home. We feel that when these two methods of approach have been complied with, we will in our plan for 1939 have a very complete set of recommendations for the farm and home, a definite goal for each farm family to work toward in connection with each soil-type area.

The local committees which have been selected at educational meetings held in the soil-type areas will compose the county land-use planning committee and will be used by the extension agents in connection with their respective councils in the execution of the recommendations outlined by the local committees to coordinate the efforts of all local land-use committees and all related agencies.

All-farm demonstrations in Young County were selected heretofore on a basis of commissioners' precincts regardless of size and tenure, and were selected primarily on the basis of the willingness of the individual to do the work. In some cases those we selected could have been much better suited to the soil-type area they were located in than they were, while on the other hand we have in progress a demonstration in the soil-type area mentioned above which fits in size of farm and organization of enterprises, almost exactly the recommendation made, that of Mr. and Mrs. G. E. Caskey of the Red Top Community. This demonstration was begun 3 years ago before the recommendations listed above were made by any committee, and many of the recommendations made had already been complied with, but since planning work has gone as far as it has, this farm family is working toward the recommendations set up by the group, and in due time one shall be able to see where the recommendations of land-use planning committees are effective in providing a standard of living, what we as extension workers desire. So far, this demonstration has exceeded all expectations, and from the progress we are making we think we are on the right track, and I believe it is the first

illustration that the whole-farm demonstration should be: First, a basis for consideration for land-use planning work, and second, the place where the development and execution of the recommendations take place.

In order to correct the criticisms that are made in regard to not having gone far enough, we as extension workers have already begun to work to carry this a step further although our land-use planning work is not complete. On last Monday, January 30, we conducted a training school in the county office for all-farm demonstrators, supplemented by phosphate demonstrators who are cooperating with the TVA, a good portion of which we hope will be all-farm demonstrators for the purpose of training these people in a simple system of record keeping and how to prepare a farm home production and better food plan and a suggested plan of individual development within the family itself. In the morning Miss Anderson and I went into detail in the discussion of the things mentioned above and land-use planning recommendations with the express purpose of trying to show these individuals that this work would not be as difficult (especially record-keeping) as might have been anticipated. In the afternoon in order that all the demonstrators involved would have an idea as to what the proper farm food supply should be, one that included the fruit phase, vegetable phase, and grain phase, poultry and poultry product phase, dairy and dairy product phase, meat phase and grain phase, we conducted the tour to seven demonstrations in the county that illustrated each of the above phases. Some 40 people, men and women, attended this tour. Outstanding demonstrations in regard to some of the land-use committee recommendations and the various phases of farm food supply were selected on various farms in the county so that the people visiting these could visualize what would be a perfect set-up on any farm if all seven of the demonstrations visited could have been put on their all-farm demonstrations. Since we were starting out a new group of whole-farm demonstrators, we thought that this method would give them a more definite idea as to what is meant by the all-farm demonstration and what the ideal should be.

It is our observation that so far as the recommendations for individual farms are concerned, the land-use plan of work should be used and demonstrators selected that will follow as nearly as possible all the recommendations set up. It is a farm family affair, and there is no distinct dividing line between men's and women's interest; therefore, the entire farm family is involved, and after all, the one problem of extension work is to bring the standard of living up high enough for the farm family so that these people can have a much fuller home and community life than they have had in the past. I might quote at this point Mrs. G. E. Caskey, all-farm demonstrator of the Red Top Community in soil-type area No. 2. She states, "It is through the cooperation of the agricultural and home demonstration agents and whole-farm demonstrator in putting into practice the recommendations made by local land-use committees that the whole-farm demonstration will succeed," and she adds further, "The Extension Service can build a much stronger program and bring about the ideals we are working toward much quicker through the use of the whole-farm demonstration, and the whole-farm demonstration should be selected on the basis of the soil-type and recommendations made by local land-use committees rather than commissioners' precincts or some other subdivision."

Probably the most important thing accomplished in planning work in Young County is that the farm men and women are beginning to think more in terms of the whole-farm family and in organized way in regard to a long-time agricultural program that will bring home and community more culture, comfort, and happiness.

THE PLACE OF THE FARM AND HOME UNIT DEMONSTRATION
IN LAND-USE PLANNING AND PROGRAM DEVELOPMENT

Harriet Patterson, Home Demonstration Agent
Cleveland County, Arkansas

In 1938 we had and in 1939 still have 16 farm-unit demonstrations set up in Cleveland County, Ark., one in each township, and after a year's observation and study it is my opinion this type of approach to land-use planning is one of the most practical demonstrations Extension Service has undertaken. All plans are built around increasing the farm income through proper land use and securing a more abundant living and a richer family life through proper home management, improved standards of living and planned use of products available at home.

All of Extension Service's various demonstrations are brought together on one farm and home acreage so that we may not only judge how one demonstration reacts against another but we may also see, test, and judge the advisability of promoting various demonstrations in the different townships of the county. We have demonstrations which prove at the Experiment Station to be practical. But many comment "Well it works here but now my land is different and it won't work back home." When these demonstrations are brought to the neighbors' home and farm, we, through a common bond of neighbor relationship, have more faith in them. Then too, some do not avail themselves of the opportunity to visit experiment stations when they will visit tried practices which have been set up on their neighbors' - shall we call it - "experiment station" of tried and proved practices.

I shall now give you the inside mechanism of how we set up our demonstrations in Cleveland County, Ark. The county agent and I (and may I clarify here that as I refer to "we" I mean the county agent and I, because, after all, Extension Service is a service where the two agents' plans of work must be as closely correlated as we would expect the farm and home plans of work to be) studied the farm unit plans, we talked about them, discussed them, and were believers in farm units before we even suggested them to two of our strong demonstrators. We visited each of the families and talked to the parents and children alike, all seated in one family circle. We explained what we thought was the value of the demonstration, that of utilizing every foot of land by two types of plans, a 5-year plan and a 1-year plan and then, too the systematic budgeting of the family income and systematic planning for a 5-year home-improvement and home-management program.

We explained to this family how a portion of the income which was being used to purchase feed could be released for other purposes if the feed acreage were planned so as to supply ample needs on the farm for livestock consumption. After conversing about an hour and discussing the various phases of the demonstration, we left to give the family an opportunity to discuss it among themselves because it is quite true that your successful demonstrators are those who want the demonstration. After about a week we returned to set up the demonstration. That was how our first two families were selected.

We have a county agricultural committee composed of one farmer and one homemaker from each township in addition to one representative from each Governmental agency in the county. These farm families in the county who were interested in being farm-unit demonstration families made application to the county agricultural committee and at a meeting of this committee one family from each township was selected.

We have a variety of individuals and farm practices. Some families are young, just starting in life, others are middle-aged with children, some middle-aged without children, and two families are past middle age with children married and away from home. The smallest farm is 40 acres and the largest farm is 800 acres. Some have tenants and some do not. Educational differences are marked also, varying from some college work to one farmer who has had 2 days in school.

The demonstration, regardless of the individual and farm acreage, involves the making of two farm and home plans and this planning was done at our second visit. The extension farm management specialist and the home management specialist worked with us and we worked with them when the first farm unit was set up. From then on we have set up the remainder. The two farm plans are the long-time and the short-time plans. The first to be made is the long-time plan which sets up goals reflecting the aims and ambitions of the family, and when I say family I mean the entire family. It may take several years to reach these goals, therefore it is necessary to make a plan for the current year's operations. This may differ greatly from the long-time plan, but if properly made it will be a step toward the goals set up.

The entire family, children included, decides what enterprises it would like to undertake; if these are feasible they are included, then plans are made toward those goals. The production of food and feed for home use is usually the first consideration in making the farm plan. The food is budgeted for home consumption and surplus for canning. From this budget the garden is planned, the number of beefs, hogs, poultry needed are planned, then the amount of food necessary for those animals to be used for home consumption is calculated. An estimate of the cash needed for (1) family living expenses, (2) farm operating expenses, (3) improvements for the farm and home, and (4) interest and mortgage or debts, is included also.

The past year's cropping system and cash receipts are weighed against the estimated needs for the coming year and these differences formulate the starting point for the long-time planning.

The county agent, farmer, and boys make a trip over the farm to determine the possibilities for improving the cropping system so as to utilize every acre on the farm and secure some type of income from each foot of land. It may involve establishing pasture or feed crops which might need marketing through livestock and poultry; it may include selective cutting of timber; taking an eroded field out of row crops, or whatever enterprise will secure maximum returns from the farm and fit into the long-time plan.

The home agent, the homemaker, and girls of the family sit down and plan for home improvements, both immediate and future, well-balanced, year-around gardens, family canning budget, poultry needs, meat supply, dairy needs, orchard, water supply, yard improvement, adequate storage laundry facilities, furnishings, both new and renovation of old, health, recreation, child guidance, both discipline and monetary allowances, and home industries.

The men return and the family circle and agents discuss plans further. Then the family makes the formal plans, the agents are merely at hand to advise. Those plans are taken into the extension office, typed, and a copy is returned to the family, one is kept in agents' file and the other is sent to the farm and home management specialist in the State office.

Home and farm account books must be kept. It seems to us the ideal time to set up a farm unit is late in November or early in December when the family has time to study plans and make plans for taking over the new demonstration. On January 1, records are started, and the plans get under way. We made a visit to each unit once a month for the first 3 months and since then only once every 2 months. The agents never make a visit alone; one doesn't go unless he or she is accompanied by the other. We think this type of demonstration is one program for two to work together and not two programs, so instead of visiting the farm or home we visit the farm and home.

Our demonstrations have been under way for a year, and not a single family wishes to drop out. We are planning to establish about three more in 1939. All 16 of our farm-unit demonstrators entered the plant-to-prosper contest, which is sponsored by the Commercial Appeal, a newspaper of Memphis, Tenn. Both county family winners were farm-unit families. One of these families won second place in the State in the farm-operator division.

I am going to relate to you the results of our farm-unit demonstration of the Hearnberger family for the first year.

One of their goals was to increase the number of cash crops: The sweetpotato crop was increased above home needs; 100 fruit trees were added to the home orchard; lespedeza acreage was increased for hay; improved varieties of corn and cotton were planted; and 14 acres of rye for winter pasture were sown. Contour ridges were constructed on all the pasture to conserve the moisture. The pasture was reseeded with lespedeza; and plans are to sow hop clover this month. Weeds were controlled for the first time on the pasture, encouraging the growth of the grass and legumes.

They have purchased a purebred Hereford sire to improve the quality of their feeder calves and have replaced a grade brood sow with a registered Poland China gilt. They purchased a purebred Jersey heifer and assisted in organizing a community association that has purchased cooperatively a purebred Jersey sire to be used by the community.

The home-made home was constructed in 1936. The home was repainted, the floors and woodwork refinished, an Electrolux was purchased, and a china dinner set added. Home-made games were added to the family recreation program. Yard plans were drawn, and work has been begun on its improvement. The four members of the family shared equally in farm and home responsibilities in proportion to their ages.

They assisted their tenant and encouraged him to cooperate in a live-at-home program.

All families have made adjustments similar to these.

All 16 records, upon examination at the end of the year, showed an increase in the net worth of the family. More dollars were made and saved. On a visit to these homes you will see many new home conveniences and improvements. One family has shown a decided improvement in family participation of recreation activities.

Through the cooperation of T.V.A. triple superphosphate was obtained to fertilize pastures, meadows, and other soil-conserving crops. All these farm-unit demonstrators reported considerable increase in the carrying capacity of the pasture, and increase in hay yields. The results on these farms have justified plans for obtaining larger quantities of triple superphosphate. Meetings are being held this week by the county agent to procure for any interested farmers in the county this fertilizer from the AAA by grants in lieu of their soil-building payment. This fertilizer will again be used on pastures and soil-conserving crops.

Farm-unit planning is a privilege for the farm family because compensation is secured through land-use planning and a variety of cash enterprises, due to the fact that all plans are built around land-use planning, increasing the farm income both through cash and products used at home.

The Extension Service program is strengthened materially through the farm-unit demonstration. We plan to have a county-wide farm and home tour of our 16 families in the fall.

This type of demonstration isn't without its problems, but the challenge is meeting these problems tactfully and wisely.

One of our men demonstrators didn't want the flock of chickens culled. They had hatched these chickens, and they were getting a fair number of eggs. One glance at the flock would indicate they needed a good culling. We didn't say much about the poultry flock in our plans of work, but a little later the home demonstration club spent a month studying poultry. One day

this demonstrator was in the office and I said, "Those club women in your community have certainly done a nice piece of work in poultry, and since they have I would like to have a community-wide poultry school. Would it suit you if we would call that meeting at your home? You know we feel more at home doing work on our farm-unit farms." He said, "Yes, come right ahead, you know our place is open to you two any time you want to come." I said, "Well, now we want to study the birds in the flock, and could you keep them up? We would like to point out the good and bad points as we talk about them." We had the school and we were demonstrating culling. We had this man by our side and as we culled one he felt its bones, just as we did. He said, "You know, we always have wanted our flock culled; will you cull it now?" So together we culled 22 of the 50 birds.

We have had another problem of the farmer wanting to plan the crops and land use and not wanting to participate in the home plans. The reply usually is, "I leave all that up to the Missus." We met this problem by alternating our planning, first one of us would plan and ask questions of both the farmer and homemaker; for example, when planning the feed, we ask the man more about the livestock but direct the poultry-food requirements a little more to the homemaker; then when we get to the home planning we direct the engineering problems more to the farmer. By doing this we are alternating questions from one to the other on the same plan. This helps them to realize the interdependence of the farm and home operations. One couldn't answer all the questions about any one phase of the plan.

Record keeping was a problem. At first we asked them to keep all expenses and write down on a piece of paper all money taken in, and when we made our visit we took time to get their record books up to date. They were all just naturally interested in the records, but we have found the women keep better records than the men.

One family was divided on whether or not to have surplus poultry for income. The homemaker said they weren't making anything off the chickens; the farmer said they were. To solve this problem, we suggested they keep accurate records for 1 year, just as an experiment, and then let the records determine their future practice. They cleared \$165.82 off 125 hens besides those poultry products used at home.

We, the agents, invite you to visit our farm units. Cleveland County, Ark., is poor in dollars but rich in interesting experiences and sincere people who are very friendly to those who try to help them plan for improved homes and land-utilization practices. Friends and experiences of this type take the tired feeling out of a hard day's work for these two extension service agents in Cleveland County, Ark.

THE PLACE OF THE FARM AND HOME UNIT DEMONSTRATION IN

LAND-USE PLANNING AND PROGRAM DEVELOPMENT

Bonnie Goodman
Home Management Specialist
Oklahoma Agricultural and Mechanical College

The farm and home unit demonstration has a very definite place in land-use planning and program development. This demonstration is an analysis and study of individual farms and homes of which a county or area is composed. Shouldn't this demonstration precede program development and land-use planning in order to furnish valuable data upon which to build a program and to plan wise use of the land for a county or a community.

I noticed in reading some of the material on land-use planning from the United States Department of Agriculture that there was a need for applying public programs toward more effective land use by studying present economic and social welfare of the area, the people, the systems of farming, the income, the resources, the trends, and the possibilities.

In Oklahoma the farm and home unit demonstration is a correlated study of single enterprises on the farm and in the home in cooperation with the family, county agents, nutrition, engineering, agronomy, farm and home management specialists. Our farm and home unit demonstrators keep both a farm and a home account book.

How can we know whether the land is being used wisely or what recommendations to make for changes until we know how much money and nonmoney income the land is producing in that particular area or county? Whether the income is high or low per acre would influence the recommendations the committee might make concerning land use, but how would they know this until the farmers have kept records on the crop yield per acre? How would we know if dairying, cotton, wheat, or general farming is profitable on certain land until we know how much money the farm has made?

In Oklahoma I would not have known that the average yearly cash income of a group of farm families in Area 9 was \$872 and \$1455 in Area 12 without the farm and home unit demonstration. Would this information not be of value to the farm management specialist in developing a land-use planning program for an area? The land use and management would bear a direct relation to both money and nonmoney income. Perhaps the low income would be due to poor land needed to be taken out of cultivation or improved by good farming practices. The land may be wisely used, but management is poor. This can be detected in the farm and home unit demonstrators' account books, as these give the income, overhead expenses, size of farm and type of land, as well as improvements and amount of land devoted to each type of farming, and the yield per acre. Making analysis of farm records according to size of farm, size of income, and type of farming, such as all cotton farms, or all wheat farms, would give valuable data in determining recommendations for land-use planning in the various areas or counties.

How can an adequate cropping plan be made for the land until the soil in that particular farm or area has been analyzed by the agronomy specialist, to know what crop the land is best suited for, or what the soil needs?

How can we know whether or not the land is used wisely in producing food for family use unless we know the size of the garden and truck unit and how much food it is producing for home use? In Oklahoma we would not have known that the average value of farm-furnished foods per family was \$207 in Area 16 as compared with \$341 in Area 7, with a State average of \$270, nor would we have known that the average value of vegetables used by the family from their farms was \$18 in Area 3 and \$74 in Area 7, had we not had families submitting their farm and home accounts for analysis, whereby we could get this data. The nutrition specialist needs these facts to assist the farm family in planning their diets in the various areas. Perhaps she will suggest that they use more land for gardens and produce such as potatoes, and melons, after she checks their food supply. If markets are available, how do we know but what it might be profitable for families in that area to use more land for truck cash crops? Would this information not help the district agent in knowing whether or not to urge the program-planning committee to include gardening in their home demonstration club program?

The analysis showed that dairy products used in the home ranged from \$65 per family per year in Area 9 to \$145 in Area 12 and \$20 for meats in Area 2 to \$91 in Area 6. Would such information not be of value to county agents in planning their programs of work? Perhaps they need to stress adequate amounts and use of meat, and dairy products in their year's program, or to bring in the specialists for these various demonstrations.

How can data furnished by farm and home unit demonstrators be of value in general program development? In Oklahoma the total family living expenses ranged from \$411 per family in Area 16 to \$938 in Area 3 with a State average of \$737. Should the same programs of work be planned for families who spend \$411 as for families who spend \$938 for family living, with such a wide variation in spending patterns?

Would it not be of value to the clothing specialist in developing her program to know that we found families in Area 16 spend \$66 per year for clothing and families in Area 3 spend \$122? Should she recommend the same clothing practices in both areas?

Would it not be of interest to the home furnishings specialists to know that in Oklahoma last year farm families spent \$39 per family in Area 16, while the families in Area 3 spent \$141 for furnishings and equipment? Should she recommend buying the same kind of living-room curtains for families in both areas?

Would this information not also be of benefit to the home management and engineering specialists in making recommendations for type of electrical equipment to purchase in the various areas?

I hope that I have given specific information to prove that the farm and home unit demonstration has a definite place in land-use planning and program development.

WHAT IS THE JOB OF COUNTY EXTENSION AGENTS TODAY?

W. I. Glass,
District Agent,
Texas

The job of the extension agent today is just the same as it was in 1903 when Dr. Knapp began his first demonstration, which was his method and is our method of teaching; and the same method as defined in the Smith-Lever Act of 1914, which was passed for the purpose of aiding in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics, by field demonstrations, publications and otherwise, with, of course, such modifications as changing times demand. To educate and inspire people, to improve their mental attitude, to make them happier and healthier, and to contribute to a sounder financial condition which will result in a more satisfactory rural life is the ultimate goal.

If the extension agent is to teach by the demonstration method, then the source of his information is of primary importance. He should be guided by results of research, combined with knowledge of local soil and water conditions, growing season, markets, and demand.

The demonstration teaches very little unless seen or publicized. Seeing is believing, so when the demonstration has reached the proper stage, field tours should be arranged, getting the largest possible group of interested farmers to view the progress or results, as the case may be. Local publicity on progress and results of demonstrations should not be overlooked. In the first place, it will increase the attendance of field tours, and result reports, if good, will impress many interested farmers who did not see the demonstration. One of the best examples of this is the report several years ago that the experiment station at Spur had terraced the fields and pastures immediately above a 100-acre lake that had never been known to be dry, and that the lake within a comparatively short period was completely dried up, after which the cropland increased production 100 percent as a result of the water added and held. Many, many people profited by that report by trying similar methods on their own farms, even though the percentage was small as compared with the number who copied the demonstration after seeing it.

Then, if we are to teach by the demonstration method, we are confronted with the problem of properly locating demonstrations where they will do the most good and in sufficient numbers best to serve the people of a county. Not only is this necessary for one industry but for each major industry of a county; and, to a lesser degree, for communities in minor phases of agriculture. While not essential, it will certainly make the county agent's job easier and more effective if he has the cooperation of the various organizations that are directly or indirectly interested in agriculture and people, especially boys and girls; and certainly, today, we expect him to secure their good will and help.

Each community should have some kind of community organization for the purpose of promoting civic, social, educational, and recreational activities for all members of the family; and the extension agents should lend every possible assistance by assisting in organizing, by inspiring, by appearing on the programs, by procuring outside talent to appear on programs, and, in general, from behind the scene, to lead the citizenship to a fuller community life.

The extension agent of today should never miss an opportunity to use the radio in furthering agriculture. It is new to us, but we find it very profitable and certainly can expect to reach more people as time goes on.

County shows to exhibit to the public in general should be sponsored by the county agent and 4-H Club boys. Separate shows held at intervals for beef calves, pigs, sheep, crops, and other farm projects will give better results than to have one big show for everything; and will command a greater total attendance as well as more interest.

More boys should be enrolled in 4-H Club work, more time should be spent with them by the agent, more completions should be secured, quality of products improved; and then come the things that are not in the field demonstration. The agent should see that the boys have their fair share of fun; he should inspire them to complete high school work; and, in many cases, he should inspire them to go to college.

A county council of agriculture should be the agricultural board of directors in each county to plan and work with the county agent. The members of the council, which should include from 8 to 20 farmers and ranchers, should be selected by farming-type areas, so each area will be represented in locating problems and planning solutions. The council plus one or more women from each area, plus representatives from other Federal and State agencies, Triple A committee, commissioners' court, and the like will form the land-use planning committee which should be directed by the county agent in locating and solving farm problems on a county-wide basis over a period of years.

Today, more than ever before, an agent should work very close to and advise with his commissioners' court. The members are farmers and directly interested in farm problems, and are usually firm believers in improved methods.

Let us not overlook the fact that the county agent has some responsibility in the agricultural adjustment administration. As an ex officio member of the county committee, as a leader in educational work and in an advisory capacity, he should give the farmers who are administering the program the benefit of his years of experience and his sound judgment.

The extension job today can be done successfully only by men peculiarly fitted to it. So, in thinking of what his job is, let's think a little about the man's personal qualifications for doing it. He should be a member of a church and one or more civic organizations, and must like people. Not

only must he like them, but he should be genuinely sympathetic toward their welfare. If he has these qualifications he will, in all probability, have the necessary pleasing personality that all successful county agents possess. Then he must be honest and energetic, and meet the educational requirements, and have a background that fits him for the job. And, above everything else, he must be a diplomat. Then if he has a good wife he will succeed.

You have heard the opinions, first and last, of all our administrative officials. Believing you would be interested in knowing what county agents - the men on the firing line - think their job is today I have asked three men, who are doing what county agents of today should do, to give me their ideas. You will note considerable variation relative to age and experience, since the first man is 70 years old; the second, 37; and the third 25; varying from 25 years' experience to a few months.

W. P. Weaver, county agent of Mills County, Tex., for the past 20 years is in his seventieth year. He says that 1939, his last year as an extension worker, is going to be the most constructive of his career. In 1938 Mr. Weaver enrolled 112 4-H Club boys, and 90 of them completed their work with 93 head of livestock and crop demonstrations. He organized the ranchmen into a livestock-improvement association, and was the first man in the county to pay his dues to the organization. He and his home agent organized two community agricultural associations which have large memberships and good attendance at each meeting.

He will hold his fifteenth and last 4-H Club boys' livestock show this month, and, even at his age, runs terrace lines daily during the terracing season.

Mr. Weaver does not consider being a good county agent his only function. He is a definite part of the citizenship of Mills County, taking part in all their civic activities. He is a definite part of the Texas Extension Service, and the district in which he works and lends every possible assistance to his fellow agents, especially new ones in whom he plants the philosophy of extension methods, good citizenship, a healthy attitude, and a wholesome outlook on life. Here is his idea of a county agent's job: To teach people by practical demonstrations the advantages of improving agriculture by soil and water conservation, quality improvement, feed preservation and utilization, livestock improvement, and, most important of all, the improvement of our rural population.

Knox Parr, who is 37 years of age and has had 12 years' successful experience, says: "The county agent's job is a trust. His responsibility is to prove himself worthy of this trust. His obligation is to carry out a sound, intensive, practical, and aggressive educational program in the county to which he is assigned. He should live with the people."

Mr. Parr is a member of the church, Lion's Club, Chamber of Commerce, and is recognized as the agricultural leader of Taylor County by her entire citizenship. His sole aim, aside from taking care of his family, is to serve humanity and especially rural people. During 1938 he worked with 700

farm families, 40 percent of the total number in the county. He worked with 160 4-H Club boys; with the help of an assistant, he sent one boy to the National 4-H Club Congress in Chicago, held a county-wide 4-H Club boys' encampment, took 25 boys to the district encampment, and others to the State fair and fat-stock show. The boys conducted demonstrations with beef calves, dairy calves, pigs, cotton, and other crops. He terraced 7,180 acres of land on 78 farms; ran contour lines on 8,120 acres on 62 farms; organized community agricultural associations; supervised 251 crop and livestock demonstrations with adults; dug 220 new trench silos against a total of 87 the entire county had before 1938; and cooperated to the fullest extent with the Triple A. Evidently the good work done and the individual standing of all extension agents in the county had something to do with the decision of the commissioners' court to erect, with the assistance of WPA a \$25,000 agricultural building, which is now complete and occupied. You may ask how he does it. Here is the answer. Everybody likes Knox Parr, and he likes everybody. They believe in his program and are willing to help him. He uses his county agricultural council, civic organizations, local leaders, community organizations, Triple A committeemen, newspapers, radio, field tours, achievement days, dairy days, county fairs, and experiment stations; and in turn offers them his help and will help them when they need him.

Sam Rosenberg, who is 25 years of age and just beginning his extension career says: "The job of the county agent today is to encourage the use and application of practical science to agriculture, by farm and ranch demonstrations conducted with men, women, boys, and girls, using the information available from research workers, specialists and farmers, which will surely result in a fuller and more profitable life."

Rosenberg has not had enough experience to relate the work he has done, but he is mentioned to show you the idea a new man has of the extension job. He attended college to prepare himself for extension work, he has the background, personality, and good judgment that is so necessary and, according to his statement, has the right view of a big job at which he hopes to spend his life.

Therefore, the county agent of today should possess the necessary individual qualifications, advise freely with his county agricultural council, do his job through the demonstration method of teaching, work with organized communities, pay special attention to boys' 4-H Club work, cooperate with all organizations interested in agriculture, use all the tact at his command, have as his definite goal to educate and inspire rural people, and accept his salary check at the end of the month with no remorse of conscience.

WHAT IS THE JOB OF COUNTY EXTENSION AGENTS TODAY?

Etna McGaugh,
District Agent,
Arkansas

Each year the scope of extension teaching broadens. Starting with the interest in improving farm practices and improving farm income, extension has expanded into the home, into the lives of all members of the farm family, and into the work of rural communities, as well as into various marketing activities.

Today extension agents are also concerned with State, national, and international matters which affect agriculture and rural life. In the past, extension agents have dealt mainly with the physical aspect of farm life. The extension agent of today builds a program which deals with the social and economic problems of rural life as well as the more tangible problems of ways and means and methods of farming and farm homemaking. Good physical farms in themselves do not insure a satisfactory farm life. Society can take away profits and happiness. For that reason, the present extension agent teaches the way organized society bears on rural life. Extension work in its deeper significance is designed to develop rural people and rural leadership.

Such matters as population trends, tariffs, land use, tenancy, conservation of natural resources, rural school problems, status of farm family, and mechanization in agriculture are just as much the concern of rural people as the selection of good cottonseed or the conservation of foods according to a budget.

The most outstanding characteristic of life today is the amazing swiftness with which its social and economic patterns are changing. As educators, it is essential that we get and give to our people a clear perspective on life and to be able to evaluate the present trends. The home demonstration agent is the counselor and guide in this new thinking on the part of rural women and girls. One of the biggest changes in rural life today has been the broadening of the interests of rural women. The rural woman is concerned with the problems of food, clothing, and shelter but she is also able to contribute her part to solving and working on these broad problems of rural life.

One of the greatest challenges of the extension agent is the development of rural leadership. This development is in the hands of the agents. We assume that all extension agents are trained in agriculture or home economics. In addition, the extension agent is a person who has vision, sympathy, energy, and organizational ability. He has vision to see a county as a whole, and leads the entire county in its agricultural development through the training of rural leaders. He has a sympathetic understanding of the needs and problems of the people and uses this as a foundation for program building. He has the organizational ability to reach all types of farm people living in the county from the biggest landlord to the smallest sharecropper.

He projects the program as a whole and does not become lost in a maze of details. It is fatal for the extension agent to envelop his life in a shell of calloused habits and to permit the details of work to whirl around him like a dust storm, shutting out his vision. He organizes a balanced program through farm and home organizations and manages the office so that they are tools for further rural leader development. In Arkansas it has been found that there is no saturation point in loading an agent who has vision to see the program as a whole and organizational ability to execute the program.

In the development of trained leadership, the extension agent is also concerned with keeping professionally up to date so that he can be a leader of leaders. A continued emphasis on 4-H Club work furnishes insurance that future rural leaders will be developed and trained. It is the long-sighted extension agent with real vision who plans and projects a broad 4-H program. Here is the foundation for a long-time rural-leader development.

Extension agents are seeing the oneness of the program and are working with farm families on all farm and home problems through the farm-unit demonstration, going away from the single phase demonstration idea. Land use and its correlation to farm living standards is the basis for all extension program planning. This is just as much the concern of the rural woman as the rural man. The extension agent has a long-time point of view in making a county program of work, setting up long-time objectives and short-time goals. This long-time program planning has been done in Arkansas through the use of the county agricultural committees. These 3,668 farm men and women, representing all rural communities in all counties work as boards of advisers for the extension programs in the county. These committees are the clearing house for all agricultural planning. Here farm people have a voice in formulating, correlating, localizing, and launching various programs, and here the natural leadership capacities of farm people have opportunity for development.

Through the vision and philosophy of extension agents, rural people are being given a greater appreciation of life in the country. We bring to rural people enrichment of mind and spirit, a wealth of knowledge whereby men truly live and satisfy the highest aspiration of life. We bring them respect and satisfaction in the work they are doing and in the opportunities that rural life affords.

The extension agent lives by the law of growth and only by keeping his knowledge usable and adding something to it each day can he be a leader. After all, it is a person's philosophy and outlook that counts. The job of the extension agent is big and broad as the person himself.

PART II

(Presented at Knoxville)

INCREASING THE FARM INCOME THE EXTENSION WAY

J. Lee Smith
Extension Agronomist and District Agent
Florida

The great objective to which all of us are working is to aid the farmer in getting a better income from his farm, that he and his family may live better. This must be done in one of three ways; namely, (1) By producing something on the farm which the family or families on the farm are not now producing and consuming which will add to their health, wealth, or happiness; (2) by producing something that can be sold or exchanged for something that is needed which cannot or is not now produced on the farm; or (3) that can be used to reduce his expenses and release funds that can be used to accomplish the same end.

To increase this income there must be other enterprises added to or shifts made in those now producing the farms' income. The adding or making of these shifts must not cause any maladjustment in the labor, other enterprises, or other production or marketing factors constituting the farm working unit. Such enterprise or shift must fit into the farms economic set-up and add to its net income. They should fit into the national and international economy. They cannot demand a large outlay of cash.

While we are dealing with large groups, this program must of necessity be one that fits the individual farm and farmer composing that group, for after all before it is effective it becomes personal and direct.

It is one thing to say a certain enterprise can be added or a certain shift can be made. It is entirely another to know it. For one to proceed to say or to do before he knows, places him in the same class as any other common promoter. He, too, must depend on propaganda and "half-baked" truths to carry his message or to influence his people. His project too is doomed to failure unless by accident it has, or there is made for it, an economic setting, it matters not how hard he tries. It is absurd to expect the farmers of northwest Florida to succeed with beef cattle when they have less than 5 acres in cropland and pasture per capita, or less than 25 acres in cultivation per farm.

Then, "know" means what? It includes among other things, a knowledge of and consideration for all the natural forces, such as soils, rainfall and temperature that play upon that enterprise or contemplated shift during the production period. A thorough knowledge of the enterprise or shift itself; a knowledge of and consideration for the size and condition of the operating

units; a knowledge of the marketing possibilities and facilities; and also, a knowledge of the people themselves - their financial status, their intellectual status, their likes and dislikes, their desires and ambitions.

To illustrate, may I name for you a shift that we think is well for our north Florida farmer to make and show you how we arrived at it, and what we have done about it, and how we did it.

These are small farmers, mostly white. Many of them have carved small farms for themselves out of cut-over lands; many have never farmed other places, coming there with the naval stores and lumbering interests; others have come from south Georgia or south Alabama where they have been small farmers. The farming done in the past has been subsistence farming, and as a result 95 percent or more produce their own pork, have some chickens, a high percentage have a small herd of cattle and milk cows, and the great majority have their sweetpotatoes and their sugarcane for syrup. Approximately 70 percent of the land cropped annually is in corn and other feed and subsistence crops. You can guess what the intellectual standard of such people would be. What cash they could get from such farming they supplemented at day labor with the naval stores and lumbering interest. That is well gone, and their greatest need is more cash.

Their fields are small. They have very few cross fences. More cross fences would mean an outlay of cash, which they have not, and less land for cultivation on their already too small farms. They need all the corn they are producing. Winter legumes such as were used farther north to increase corn yields did not succeed well, and the known commercial fertilizer did not seem to pay over a large part of the area. The corn acreage then could not be reduced to make way for something else.

Since corn occupies so high a percentage of the cropland on these farms, it was reasonable to expect one to turn attention to this acreage and see if it is being most efficiently used. It was found that this crop was grown by a dozen different methods and crop combinations. It was shown that peanuts grown in combination with the corn affected the yield of corn but slightly, and peanuts and velvetbeans as they planted them, but very little more. Corn planted alone produced 10 bushels an acre, and corn and peanuts in alternate rows only about one-half bushel less. When velvetbeans were added, it produced 9 bushels an acre. The acreage producing this feed combination was producing in addition to the corn from 125 to 250 pounds of pork an acre. These fields also provided winter grazing for the milk cow or the small herd of cattle on the farm. The value(\$10) of the corn crop when grown alone produced 20 bushels an acre; and the combination of corn and peanuts - corn 18 bushels and 136 pounds of pork - have a commercial value of \$18.10.

The 1935 U. S. Census showed that only 47.6 percent of the corn grown in the State was in combination with peanuts. The range from 7 percent in Leon County to 94 percent in Gilchrist County was surprising.

By a survey it was found that corn was produced and harvested for as little or less labor cost an acre when grown in alternate rows than when grown alone. Note that by this method the cost was only 97 percent of that grown alone, but when velvetbeans were added, the cost rose 18 percent.

A further study showed, first, regardless of where they lived, the farmers produced all pork needed for home consumption; secondly, that the percentage of corn interplanted was high around the old market centers. There was a direct relationship between the hogs marketed and the acres of interplanted peanuts; thirdly, that a large percentage of the hogs sold were of light weight; fourthly, that the soil in those counties produced good peanuts, but marketing facilities were not there or had not been long.

It appeared that by the farmers in this area shifting their methods of planting corn and peanuts from alone to interplanted, another million dollars would be added to their income. This shift would require no more land, no more fences, no large outlay of cash, and they would be dealing with corn, peanuts, and hogs, all of which they were already familiar.

It was the plan that land that ordinarily produced less than 12 bushels an acre be planted every row peanuts and corn with peanuts as thick as the land would support; that land that would ordinarily produce from 12 to 20 bushels an acre be planted to corn and peanuts in alternate rows.

What steps have been taken to get this practice adopted?

1. Meetings were held, attended by thousands of farmers and participated in by the extension agronomist, the livestock specialist, and the county agent. A marketing specialist was needed.
2. Placards were distributed throughout the area, urging the farmers to adopt the practice.
3. Circular letters were sent to the producers.
4. Marketing facilities, cooperative or otherwise, were made available.

Accomplishments:

1. The acres of corn interplanted to peanuts have been increased throughout the State. In Escambia County it was increased 163 percent, in Santa Rosa 65 percent; and in Madison 103 percent.
 2. The size and number of the hogs marketed has been increased.
 3. Marketing centers convenient to all are being developed.
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LAND-USE PLANNING AS A BASIS FOR PROGRAM DEVELOPMENT
(Review of Paper)

C. M. Hampson
Farm Management Specialist
Gainesville, Florida

The subject assigned is using farm management data collected by land-use planning workers as a basis for development of rural programs. A letter from headquarters limits me to the subject of farm management, 15 minutes, facts regarding procedure, eliminates theorizing and philosophizing, and requests something that will provoke discussion.

When preparing this paper I reviewed publications of land-use workers from other States, and I offer no criticism. The basis of most of these publications was the Federal census and answers to the questions 2a, 2b, and 3. All these data were broken down to county units. We, in Florida, use the same type of material as far as it is applicable. The census gives acceptable data regarding population, major land uses, tenure, number of farms reporting cows, hens, pigs, and quite a few other items, and it is an invaluable source of information.

We have compiled and mimeographed census data covering the last 25 years by counties. We use these data in many ways but find them insufficient to give a clear picture of Florida agriculture, especially regarding types of farming. We have a type-of-farming map of Florida showing 19 types, most of which cover comparatively small and odd-shaped areas, and only one of which covers even a single county sufficiently for census data to be reasonably applicable to most of the farms within that county. Further, the census gives nothing to assist in picturing the management of farms including financing. It does not point out successful farm types and organizations to use as standards, nor does it show locations of farms or races of people, or give an insight into marketing, home, and community problems.

Realizing the limits of census data used on a county basis, we made a study of them in St. Johns County on a voting precinct basis, which is our smallest civil unit. We then made comparisons of the census data with actual conditions.

(Here the accompanying table (p.) was exhibited as a chart and attention called to the data, one line at a time, with the purpose of trying to picture the type of agriculture within a precinct as shown by the data listed on the line in question. After the charted data for a precinct was discussed, the actual status of the agriculture within the precinct was given.)

As an example, line 1 indicates general farming to be predominant, since all farms produced oranges, and most of them produced corn, vegetables, and hogs. Oranges, "other vegetables", hogs and feed for livestock seem to be the leading enterprises in the order named. Line 2 indicates oranges to be quite important, "other vegetables" next, corn seems to be of little

ST. JOHNS COUNTY, FLORIDA
(From 1935 Census)

Precinct 3	Line	Corn	Potatoes	Cabbage	Other vegetables	Oranges	All cattle	Sows Gilt
Percent farmers reporting	1	61	5	5	90	100	44	71
Percent harvested acres	2	15	1	2	18	57		
Units per farm reporting,								
A or No.	3	2	2	3	2	5	28	10
Value crops sold, dollars	4		350	300	6,400	14,000	1,500	5,000

Precinct 4

Percent farmers reporting	5	52	3	3	76	89	52	68
Percent harvested acres	6	52	5	2	14	9		
Units per farm reporting,								
A or No.	7	8	10	3	2	2	28	5
Value crops sold, dollars	8		1,750	300	6,600	6,000	2,800	4,000

Precinct 10

Percent farmers reporting	9	74	64	25	53	67	60	33
Percent harvested acres	10	59	77	4	4	5		
Units per farm reporting,								
A or No.	11	27	41	8	3	3	8	6
Value crops sold, dollars	12		75,000	33,000	45,000	42,000	5,400	12,000

importance since less than one-sixth of the harvested acreage was given to that crop. Line 3 indicates small crop enterprises with corn being of very little importance, since there was an average of only 2 acres per farm reporting corn, and the average yield of corn in that precinct is about 15 bushels an acre, giving a total of only 30 bushels per farm, or an amount insufficient to feed a single mule for a year. Hogs and cattle here assume greater importance with 10 sows and 28 head of cattle per farm reporting. Line 4 shows oranges to be more than double the commercial value of any other enterprise, followed in order by "other vegetables," hogs, and cattle.

A survey within the precinct shows 22 percent of the farmers own 90 percent of the orange acreage, three-fourths of whom produce no other crop than citrus fruit, and one-fourth of whom do trucking and have fair-sized herds of both cattle and hogs. Eleven percent of the farmers own 88 percent of the cattle; one-half of these farmers produce no crops for market, and the other one-half produce oranges, truck, cattle, and hogs. One-half of all the oranges were produced by men who specialized in citrus production, and about one-half of all the livestock men produced no crops for market. There are a few large citrus groves and cattle ranches, both medium- and small-sized citrus groves, and medium-sized but no small livestock farms. The census shows about 240 head of cattle within the precinct; the survey indicates there are more

than 3,000 head. The actual picture including only these items is a high degree of specialization with relatively few general farms. Cattle are of first importance from the standpoint of sales. Most of the farms are considered either medium or large in size of business.

(Precincts 4 and 10 were reviewed in a similar manner, and facts were given contrasting the picture presented by census only and the actual existing conditions.) It appears to us that there will be no advantage in Florida in breaking down certain census data to the precinct basis. We repeat, however, that much of the census is invaluable to us.

In the field of farm management we expect our land-use planning workers to secure and record for each community the sizes and organizations of the leading types of farms, indebtedness, need for loans, and probable risks of loans that might be made, estimates of receipts and expenses, marketing facilities, history of population movements, and farm failures with their causes, opportunities for expansion, and examples of successful farms of different types and sizes. The successful farms will be used in program planning as standards for each community rather than to set up hypothetical farms as standards.

Summarizing, we find census data a valuable basis for program planning, yet inadequate for certain purposes. We shall attempt, in the field of farm management, to find for each community the weakest spot in its agricultural economics and probable successful methods of strengthening the weaknesses. The information will be used along with data already at hand as a basis for better rural programs in which farm men, women, and children, and all public agricultural agencies can take part.

CORRELATING THE ACTIVITIES OF THE EXTENSION SERVICE

P. O. Davis, Director
Alabama Extension Service

Introductory to what I shall say, I shall call attention to the fact that extension work in agriculture and home economics is yet young as an educational service. It had its beginning under the simplest of circumstances but with the germ of an ambition as broad as agriculture and rural living combined. With a limited amount of research as a background and this comprehensive ambition as a goal it was on its way as an educational agency into the hearts and lives of millions of farm people.

Its pioneers, of course, were men of great vision, but I doubt if any of them ever had a vision of the complex and complicated program in which extension workers are now involved. They were concerned primarily with simple problems of production on farms and in homes because they were schooled in the doctrine that abundant production was equivalent to successful farming and

living. Now we know that production is only part of the story and that we can have economic distress on farms and in cities when our barns and our warehouses are filled with food and fiber produced on farms and awaiting a satisfactory market.

Most of us who are here this morning don't have to read history to understand the marvelous changes which have occurred within and in relation to extension work. We ourselves have witnessed most of it. Certainly we are eye witnesses to the fact that extension work got its kick-off in an effort to save cotton production against boll weevils. We are also eye witnesses to the fact that several of these fine old pioneer county agents lived to help save cotton from itself by the plow-up campaign of 1933, and subsequent cotton adjustment work that followed and is still under way.

Through all this, extension workers have done a good job of teaching, but conditions were such that teaching alone would not solve the problem. Consequently the action programs were created and brought into service to supplement what was being done in the hope that the combination would bring both economic and social relief to farm people and, through them, to all others.

It is obvious, therefore, that an educational service with duties as broad and responsibilities as great as I have pictured briefly should be well correlated within itself and in its relations to all other agencies engaged in related work. It must be correlated as to doctrine, as to program and plan, as to procedure, as to personnel, and as to objectives. Without correlation there is lack of efficiency, and there will be also friction with its multitude of evils.

With this background I shall now outline, briefly, our correlation work in Alabama. I am not presenting it as a model or as something new, but we are trying to make our work function efficiently by adhering to and using fundamentals. Others, no doubt, have done better.

In Alabama, as in the other States here represented, the county agents, men and women, are the foundation personnel upon which our service functions. All others are expected to amplify and magnify them. Next to them are the supervisors, or district agents, who supervise their work by districts and counties, but always give the county workers enough latitude for maximum effectiveness and the highest degree of initiative on their own part. We like to think of the county agent as the dean of agriculture and the home agent as the dean of home economics in their respective counties.

Then there are the specialists, about whom much has been said and more can be said but, after all, the primary duty of the specialist is to specialize through the county workers and thereby help them. Otherwise they are either "piddlers" or itinerant county agents, or both. They are not supervisors, but those who are supervisors must consider them and use them as their personnel in their respective districts.

Their work is planned in conferences of county workers and specialists with the supervisors attending as many as they can. Field trips are arranged by specialists in conference with supervisors who, in turn, check on results. Before this was done, some counties had an excess of specialist help, while other counties had almost none. Yet the needs probably were about the same.

In this way we are trying to give each county as much specialist help as is feasible and, at the same time, avoid unnecessary duplication. It also results in maximum field work for the specialist with minimum time and travel.

It is here that 4-H Club work finds its proper place in a correlated extension service program. Boys and girls who are engaged in this work are good demonstrators in addition to their training for the future. County agents and specialists, therefore, are encouraged to use them to the fullest extent for the furtherance of their work.

To correlate our work with other agencies in the State, we have created the Alabama Agricultural Coordinating Committee which is composed of the State leader of each of these agencies, including extension, research, vocational, AAA, health, education, soil conservation, forestry, farm security, and any others which may now or hereafter be in existence.

It is our intention to call this group together from time to time for discussion and planning and understanding. In this way we hope to keep them working together without bumping together.

And we have started similar procedure in the counties. In fact many of the counties have done more on this than we have from a State standpoint.

In this we are ever mindful of the fact that the ultimate objectives of all these groups are the same and that in attaining these objectives there is glory enough for all. We do insist that the Extension Service is the proper agency to take the lead in it and give direction to it.

This brings me down to program planning and making which for the Extension Service must be done largely by our own personnel after consultation with farm people and others. The interservice programs are made, of course, in conference with all who are concerned.

Our Extension Service program for the current year was worked out in conference, in which every worker in the service participated. They, of course, had conferred with farm people and were familiar with their needs and wishes. Thus it was entirely democratic as to procedure and practical as to objectives.

Broadly speaking, it is based upon the fundamental fact that good farming from a production standpoint is attained when all the land a farmer has is used wisely. Under present conditions, for Alabama farmers, this involves:

1. A first-class job in the production of the allotted acreage to cash crops such as cotton, tobacco, and peanuts.

2. A good job of living at home. In this we have failed to make satisfactory progress, although we have recognized its importance and talked about it from the beginning of extension work. Its importance is so great as to challenge the best there is in all of us, and then much will remain undone. Yet it is the very essence of good extension work.

3. After we do our cash-crop job as it should be done and live at home as we should live, we should have enough land to make pasture and feed for livestock to give us a better balance between crops and livestock. In making this statement I am mindful of the national agricultural situation which we must always consider, but it hardly comes into the picture when all the facts are considered from a local standpoint. With King Cotton sick and getting sicker no fair-minded person can deny the southern farmer an opportunity to develop along other lines to the extent of his land and his other resources, needs, and opportunities. To deny him this would be to ask him to commit suicide by starving himself and his family to death.

4. Fourth on our production program is our timber, long exploited and usually neglected. Yet, in Alabama, farmers have about as many acres in trees as they have in all other crops. We are trying to make our land in timber twice as productive as it is at present, or to make it produce a living for twice as many people.

But production alone, as I have already indicated, will not do the job that should be done by farmers and for farmers. After production comes marketing, and after marketing, the exchange of the agricultural dollar for what the farmer and his family need and want, which is largely the products of industry. Herein is a story too big for discussion here but the Extension Service can't escape it and give farm people the educational leadership to which they are entitled and for which they rightfully depend upon the Extension Service.

As teachers and leaders of farm people we are now face to face with the solemn fact that it is our duty to go all the way with them in their fight for parity for their products and equality of opportunity for themselves. In doing this we must be mindful that we should be intelligent teachers but not agitators.

And we must not forget that good teaching is not doing for those who are being taught. Instead, it is instructing and inspiring to action for self and mutual gain that which is fair and constructive. No good teacher ever does for his students anything that they can do for themselves except by way of example.

Realizing that a multitude of doctrines may arise with a multitude of agencies in the field the Alabama Extension Service is now engaged in writing an agricultural handbook or manual or bible for the use of all agricultural

workers in the State. In this way we hope to correlate all of them on the same doctrine and thereby avoid confusion and misunderstanding. The first edition will be confined to production but, later, we expect to include information on marketing and economics. It is based upon work of our experiment station.

Another step will be a textbook for public schools based upon our information. This, of course, will require the services of an expert in textbook writing. The main objective here is for our institution, through its research and extension work, to supply basic agricultural information for boys and girls in school as well as men, women, and children on farms and in farm homes.

So far I have talked largely about agricultural extension work, but the principles are about the same for home economics work. In fact it is all one program, in that the farm family, the farm, and the home form the extension unit which should improve and develop in proper balance. If one develops at the expense of the other all suffer in the final analysis.

We do not yet have many complete farm and home demonstrations; we are now placing more emphasis upon them. We believe that they are the focal point for correlating our entire program of production work and making it most effective.

To expand the application of this production work and to render proper assistance in marketing, economics, and in other things we are correlating and coordinating with the farm people themselves through community action or community organizations. We do not approach this as farm organization work but, rather, as organizing extension work for maximum efficiency and effectiveness. We realize that without group action, on a community basis, our results will always be limited and our work inefficient. In fact, our work will always fall short of the obligations and responsibilities resting upon us.

CORRELATING THE ACTIVITIES OF EXTENSION SERVICE

Lurline Collier
State Home Demonstration Agent
Georgia

Mr. Webster's version: "Correlate - A union of persons to exert mental or physical strength for serviceable labor for the benefit of others."

Extension Service is a national system of education in agriculture and home economics, developed by the United States Department of Agriculture and the land-grant colleges in the several States and territories. It is a cooperative program between these agencies and rural families for education in better farming and better homes and family life.

The objectives of extension education do not represent points to be reached by all people, but rather directions in which farm people may progress.

The program provides for the giving of information and practical demonstrations in agriculture and home economics and their allied subjects.

Extension work is based on local problems of rural people. Extension agents, with the aid of supervisors, subject matter specialists, Federal and State agencies, rural leaders and local agencies concerned make studies and surveys of agricultural and homemaking conditions. These studies deal with such matters as character of the soil, land use, production yields, marketing trends, consumption demand, local farm and home practices, health and nutrition, family food supplies, housing and equipment, human relations and community life.

Farm and home demonstrations are established with adults through individuals and groups such as agricultural clubs and committees and the home demonstration clubs and councils. The farm and home demonstrations are developed with boys and girls through the 4-H Clubs and councils.

As extension workers, we think in terms of county, State and national plans, but after all a county plan is a combination of many individual farm and home plans, a State plan one of thousands, and a national plan one of millions of individual farm and home plans. It seems well, therefore, for us to look at the farm family, the land from which they draw their living, the homes in which they live, and the community and its institutions of which they are a part; then study carefully with them their needs and interests in program building on a broad plane.

In our present set-up we have the agricultural staff to further one phase of the program and the home economics staff, another. We have our State staff of director and supervisors, subject matter specialists and 4-H Club workers. On the county level we have the county agricultural agent responsible for the farm program, and the county home demonstration agent responsible for the homemaking program; and the two jointly responsible for farm-home and rural community development of the county. Have we, as extension workers all along the line, stopped to remember that our particular task is only a part of a general plan, and that the true value of the service rendered by each will be largely determined by his ability to find his place in the whole scheme? We know the difficulties caused by the over-zealous specialist who proceeds on the theory that his field is all-important: for example, the animal husbandry specialist who seeks to develop livestock out of all proportion to the general farm plan, or the clothing specialist who seems not to be able to think in terms of clothing standards in line with the general level of living on the farm.

When I think of correlating the activities in an extension program, I think first of the long-time objective, and second, of the immediate aims.

Considering the long-time objective, if we could follow an ideal plan in making up a county extension program, we would want the men, women, boys,

and girls to sit down together and discuss the farm and home and community conditions, recognize the needs of the present, and their relation to the State and national situations. On this basis, work out a program for extension work. Not a home demonstration program, nor a farm demonstration program, nor a 4-H Club program, but an extension program for the agricultural development of the county. Each group could evaluate the whole and see where it fits into the complete picture and plan its special phase of the program. At present, we recognize, of course, that there are practical difficulties such as time schedules, governmental and emergency demands, the matter of adequate personnel and so on, which prevent the working out of a perfect plan.

The farm is both a business and a home. When the security of the business is threatened, the security of the home is likewise in danger. Many farm women, during the recent years of distress, have had to know the truth of this. If farming is to improve as a business, the standard of management in the home must develop with the standard of management on the farm and vice versa.

Some think of a farm primarily as a place to make the equivalent of rent, interests, profits, salary, and wage by investing, speculating, exploiting, managing, and working. There are millions of farm operators who think of the farm as a home, a place to live, a place to rear a family, and as a place to produce more than the family requirements, so that on the one hand the nonfarmers in towns and cities can be provided for and on the other hand the farmer may be able to buy those things not produced on the farm.

Several generations ago when each farm was an almost completely self-sufficient unit, with little bought or sold, and each producing what it consumed and consuming what it produced, the problems of agriculture were relatively simple. As more and more farm products were sold, and more and more supplies and commodities purchased, new and more complex problems arose. Today with most of what is produced being sold and most of what is consumed by the family being purchased, the agricultural problems are many and complex.

We are no longer a Nation of young people. Dr. Baker brought to our attention the significant population trends. In 1870 half of our population was under 20 years of age. Our population statistics tell us that by 1950 children and young people will make up only 30% of the whole. Something may happen to change these trends, but we need to think more seriously of adulthood and its problems. With more adults than there used to be, there will be more implications for education on the adult level.

The Committee on Older Rural Youth made its report to the Executive Committee of the Association of Land-Grant Colleges recently. The committee in its study found:

- a. Each year 200,000 young men start farming on their own account.
- b. Each year 1,000,000 young men and young women leave the farm in an effort to find a job in some nonfarm occupation.
- c. 51 percent of the young women on farms are married before their twenty-second birthday.

d. 59 percent of the first-born are to mothers under 23 years of age and 43 percent of all children born are to mothers under 25 years.

These facts lead to the apparent need of trained workers for these young men and young women, as well as for further research for information concerning the situation surrounding such young people, as well as to what extension procedures are proving most effective, if we are to build a sound educational program for this group. We could be more concerned with integration and correlation of programs for young adults, as well as the direction to which our programs are leading.

According to the 1930 census, the farm people of the South were contributing 25 to 50 percent more children proportionately to the Nation's needs than were the farm people of other sections. The South is burdened with bearing and rearing the children of the Nation. The 13 Southern States in 1930 had 32 percent of all the Nation's population under 5 years of age. This gives a very large group of boys and girls of 4-H Club age. Dr. Baker referred to the peak today of children in the 17-year age group, the crest of young people reaching maturity, and to the very great contribution that the Southern population must make to the civilized society of our Nation. This points more definitely to the importance of Extension's revamping our programs to meet this situation more efficiently.

The South has much to face with its extra share of young and immature people and the many attendant problems of varying levels of living. Especially the problem of developing the largest ratio of children and youth of any part of the country. The Southeast tends to reproduce at a higher rate, and has a larger ratio of children and young people than any other region.

In contrast to the oversupply of children in the South, is the great deficiency in some standard food products essential to vitality and health.

The facts reveal the South with a low per-capita milk production. If the daily quart were consumed it would mean a shortage of a billion gallons of milk.

The same picture may be described with eggs and other protective foods.

Contrast these essential food-production deficiencies with the oversupply of cotton and tobacco.

The contrast is seen in the abundance of cotton and tobacco against the scarcity of special commodities necessary for health and vitality, as well as for balancing the farm program of work distributed through the year, soil building, and conservation of farm resources.

Research and investigation in nutrition show that inadequate nutrition plays as important part in infant mortality; it accounts for the excessive proportion of underdeveloped school children and adolescents; it is responsible for prevalent poor health and lack of energy in adults. Diseases due to

deficiencies in diet are to be observed among urban populations, rural districts in primitive countries as well as rich nations of highly developed civilization. The wide investigation has led to the conclusion that a large part of humanity is illfed or underfed.

The density of farm population on the cropland is another limiting factor in adjusting family living. In the United States there are 13.1 acres of cropland per farm capita. We have more people than the present area of productive, tillable land available can adequately support.

In the North Central States there are 18.3 acres of cropland per farm capita. In the East Central States, including North Carolina and Virginia, there are 5.1 acres of cropland per farm capita.

In the western section there are 29.3 acres of cropland per farm capita; in the southern section there are 6.3 acres of cropland per farm capita (9 Southern States - all except Texas and Oklahoma).

Added to the pressure of population on the cropland are the disadvantages of low yields per acre of our cropland. Also, the lack of price stabilization of the cash crops grown in the South. The main crops produced for cash, cotton, and tobacco are sold on a world-wide market to get cash to buy goods and services sold on a protected market. These are factors that influence income, both cash and nonmoney for family living. There are other economic and social barriers over which the farmer alone has little or no control, such as discriminatory freight rates and interstate trade restrictions.

This presents a challenge as well as an opportunity for service to the workers in the field of agriculture and home demonstration. If the Extension Service is to meet this challenge, it will likely be in such conference groups as this that thinking and planning will be started to bring this about. We will become more concerned about the human element and their problems, and a little less concerned with special subject matter and project remedies. We will further recognize the importance of careful correlation of activities for efficient service to people.

Many adjustments will be needed in extension if this is brought about.

First, extension workers must learn to be leaders and teachers, as well as dispensers - "disseminators" is what the Smith-Lever Act calls it. A fundamental purpose of any educational enterprise is to teach people how to think and not what to think, according to some of our educational leaders.

This calls for a changed attitude of mind and more training in educational methods.

Second, we as extension workers shall need to study more, ourselves. We shall need to be better informed as to these larger economic and sociological forces and factors and their influence on the family and their situation.

Third, we must in some way rid ourselves of the idea that we must get a certain number of practices or a certain number of people reached in any given year.

We are living in a time when the machinery for wise planning is used for public affairs as well as for the home. We have county agricultural planning committees, State planning boards, national planning commissions, international conferences - all intent on making wiser decisions through careful planning. Such planning will give a program and policies that will promote the general welfare. The objective now is to get the farmer thinking about a national agricultural program. I repeat, that the extension program for the farm and the farm home, with the 4-H Club activities with boys and girls, are all closely related; all are important; and they must work toward the same big objective. They cannot be separated in their planning, or in the carrying out of the programs.

Each part of the program, the farm demonstration work, and the home demonstration work, with adults and with young people, derives its meaning from its relationship to the whole. The objectives of each department gain significance when they supplement and complement the aims of every other department.

In planning to further develop the extension program, correlating the activities, ask yourself these questions:

1. Is the planning to be limited to problems of production and marketing?
2. Is it to take into consideration consumption needs?
3. Is it the intent as a long-time program to include an analysis of situations, resources, their utilization, future needs, and cooperation with other agencies in the county and State?

The primary task of the person or leader who seeks to be helpful in guaranteeing to farm people successful living in a modern society is to understand and be able to assist farm families to preserve and nurture the primary values of family living while getting these other more obvious material things. Today the challenge and the opportunity to those in the farm work or home work of Extension Service is of equal magnitude - to help the farm family to take the best advantage of the provisions of the educational and service programs designed to help agriculture and the general welfare. Effort is being made to help the farmers to formulate their own plans, and translate the results into better living. There is a responsibility for Extension to so correlate their activities with other agencies and services for efficient service to the people. This has already been discussed by other speakers during this conference.

If the Extension Service has as its basic purpose the advancement of rural life, it must recognize the structure of relationships in the family and ascertain what effect each bit of teaching has upon that structure. It is not enough to teach better methods. We must also teach the family how to adjust its patterns of living to those methods. We need, in addition, to find every possible means whereby we can help the rural family to relieve tensions produced by modern situations. Notwithstanding the importance of farm income, due con-

sideration should be given to rural family wellbeing and happiness. The family objective should be the guiding principle in the development of the entire extension program.

By "family" objective in the development of extension, we mean that each part, whether in the field of agriculture or in the home, and whether with adults or with young people, should be developed so as to maintain the immediate advance of the individuals or group, and at the same time opportunity should be afforded for developing the interrelation of the farm, home, and family.

Example: Agronomy may have as its immediate objective the conservation of the soil, the maintenance of fertility, but it has also a family objective, the perpetuity of the farm itself, the maintenance of a higher standard of income and better work relationships. Nutrition may have as its immediate objective the production, conservation, and use of better qualities of food, but it has also the family objective of health and family satisfaction and better work relationships. In farm and home demonstrations with boys and girls through the 4-H Clubs, the immediate objective may be the growing of improved varieties of fruits and vegetables, the raising of a better cow or beautifying home grounds, but it also has a family value in creating in the minds of the young people a desire for a better home life and a better understanding of cooperative effort which integrates the family.

Advancement along these lines requires that all extension workers be given opportunity to shape their plans of work toward this end. They need interest, insight, and data on family relationship structure, and the effects of their particular subject matter upon it.

To attain these objectives requires planning so that all extension workers now in service may have, through conferences, short courses, and special training schools, an opportunity to add to their knowledge the more recent understandings in human relationships and social forces as they affect farm-family life. In order to bring about better correlation, the extension worker must recognize:

1. There is a need for a better understanding of the family goals and objectives - through discussion by all members of the family.
2. By helping the family by means of a plan to make more effective use of their resources so that they may attain more of the satisfactions which they desire.
3. An understanding of production, returns, and expenditures for both the farm and the home is necessary in planning for either of them.

The home demonstration activities with girls in the 4-H Clubs and with women in the home demonstration clubs are based on farm family situations providing for family building and living, and the farm demonstration activi-

ties with men and boys providing for efficient production and marketing and soil building, all having the ultimate objective of improved rural life.

Plans for family building and living are just as important as plans for soil building. The men are able to tell us how much real income the land is able to produce; the women can tell us what level of living this income can furnish the family. These two things must go hand in hand.

The development of county and State programs involves two important phases of program planning; (1) The annual or short-time plan of work, including specific activities of more or less immediate application; (2) the long-time program having to do with the efficient use of soil resources, the economic distribution of agricultural products, home standards, training of young people, community building and relationships with other agencies.

Extension projects and activities are a joint responsibility of administrators, supervisors, specialists, county workers, and research and other teaching staffs.

The plan of work for the year made by an individual worker, includes projects and activities which offer some solution to problems of an immediate nature. These activities are based upon the local needs and interests, of the people, as interpreted by the people themselves. This plan must be made with relation to contributions from other related subjects.

For instance, the nutritionist in developing a plan with the committees is concerned with the health of the family, both mental and physical. Efficient planning in relation to health implies not only understanding of the requirements for good health, but also the ability to provide the essentials for achieving good health. It is essential for maintaining optimum health that habits of sanitation be established, that nutritional, clothing, and recreational needs be met adequately, and that housing facilities be such as to insure privacy, opportunity for relaxation, safety, comfort, and something of beauty. All these needs must in some way be met by each family within the limits of its available resources.

Consequently, an opportunity arises for the nutritionist to make plans for correlating activities with the food-production specialists, the clothing specialist, and the home-management specialist.

The long-time program has become fairly well established. The general public sees only concrete activities such as the farm and home demonstrations with boys and girls enrolled in 4-H Clubs, livestock enterprises, home improvement, poultry culling, the year-around food supply.

Economic planning, social planning, or land-use planning are great in their value to the extent that the minor parts are related to the whole structure.

The shifts in land use an individual farmer makes in his annual cropping plan are made with the thought in mind to increase net income, and are also related to adjustments needed in the whole agricultural situation, and to maintain the soil.

The activities of the Extension Service should be based on the understanding that the desire for better living and the earning of the means for their realization, are dependent on each other and that they must go hand in hand. Farming is a combination of making a living and living a life. It is unique in its organization as a business. Extension education should assist farm families to use all instruments and agencies to translate intelligence into better living.

The goal of better farming and better living for rural people should unite all forces of the Extension Service in agriculture and home demonstration. Each one has a contribution to make in the promotion and development of such a program.

It was perhaps necessary in the past to stress efficient plans along individual lines rather than on relating projects and activities to make the programs more effective. The increased emphasis on fact analysis as a basis for program development will give to those interested in agricultural development a picture of the situation and the underlying problems, the type of program to meet the problems, and the contribution each department, agency, and committee can make in their solution.

There must be an understanding and a sound working relationship between individuals within departments and divisions within the Service, if the service to the people is to be efficient. If a worker loses sight of the farm people as the objective of the program and thinks in terms of activities and enterprises, his efforts will be less effective. This can also be said in regard to the relationship between Extension and other agencies and services set up to help agriculture.

We need only to apply recognized teaching principles to extension work.

It is essential that activities, with any group, adult or young people, be predicated upon the problems, needs, and the interests of the group concerned.

We know that individuals and groups develop and grow when they participate in the solutions of their own problems. As Extension workers, our efforts should be directed toward assisting people to work out their own answers. However, it is highly desirable for Extension workers to be concerned with the "direction" in which an activity might lead, as well as the correlation and integration of activity.

Once a plan is made and started, it should be finished. Project should be started with caution, but pursued with persistence.

There should be opportunity when extension workers are given recognition for effort in promoting and developing a unified program. Constructive criticism is helpful, but we need to build the prestige of our workers.

In setting up a plan, one of the essential steps of every program is measurement, or evaluating the results. This will show whether the project is worthwhile or not. It will locate weaknesses and indicate points where improvement is necessary.

Correlation is dependent upon a plan. Where individuals and departments are engaged in contributing services toward a common objective, there can be no correlation unless a plan is developed and the points of cooperation indicated. When lack of correlation appears, there is lack of a plan agreed upon. One does not know what the other is doing, and duplication and conflict result. A plan calls for not only project activities, but designates who is to do the jobs outlined, when they are to be done, and by what method, and how results are to be measured.

Techniques of correlation are essential to cooperation. As a matter of course, we observe that good plans well formulated by a group fail of correlated effort because details of organization are not worked out. Someone must stay with the project until each cooperator knows specifically and definitely what his responsibilities are.

Supervision of the plan to see that it is carried through is essential. A well-formulated plan with responsibilities assigned frequently fails of realization because those responsible for a part of the plan fail to carry out their part. In every successful cooperative project there is one who furnishes the drive. Someone must stay with it, or the project might as well not be started.

I have not attempted to tell you how correlation can be done. I have only tried to bring to your attention the opportunity which is ours today for serviceable labor for the benefit of others through better correlation as well as direction of Extension activities.

WHAT IS THE JOB OF COUNTY EXTENSION AGENTS TODAY?

John R. Hutcheson
Director of Extension
Virginia

Since two men and two women have been assigned to take part in the discussion of this topic, I take it that it was intended that the men should discuss the job of the agricultural agent and the women should discuss the job of the home agent.

The job of the county agricultural agent is no greater today than it was in the horse and buggy age when I entered extension work 25 years ago, but the appreciation of the magnitude of the job has grown materially in that time. The first county agents whom I knew were itinerant teachers working over two or three counties with from 25 to 50 4-H Club members and an equal number of adult farmers. They usually tackled just one phase of the agricultural problem and taught through small-scale demonstrations. That this teaching was usually thorough and effective is evidenced by the fact that a high percentage of these early demonstration farmers and club members have stuck to the program throughout the years and are now the backbone of the whole extension system of teaching.

Many early extension workers seemed to have the idea that, if they could teach farmers to produce more efficiently, most of the farmer's problems would be solved. However, it was soon evident that this efficiency in production must be accompanied by efficiency in distribution, and extension workers entered aggressively upon a program for improving marketing methods.

A little later farm leaders came to realize that, even with efficient production and efficient marketing, agriculture could not sell in a free, uncontrolled market and buy in a closed, controlled market and maintain a proper balance with industry and labor. This resulted in efforts during the past 6 years to fit production to consumptive demands.

During recent years it has become increasingly evident that before there can be any general prosperity among farm people that the purchasing power of the low-income groups both on the farm and in the cities must be materially increased. This has led to emphasis in the extension program on better standards of living.

There have, of course, been some extension workers since the beginning who recognized that any well-rounded educational program with farm people must include increased efficiency in production, increased efficiency in distribution, the fitting of production to consumptive demands, and the improvement in standards of living. But due to insufficient personnel it was not possible to develop such a program. However, the early efforts along these lines by extension pioneers resulted in the setting up in recent years of many agencies for the development of special segments of this program. The Soil Conservation Service and the Farm Credit Administration have as their particular function lowering production costs. The Farm Credit Administration and the Agricultural Adjustment Administration are definitely charged with helping farmers to improve methods of marketing. The Agricultural Adjustment Administration has as its particular function the fitting of production to consumptive demands. The Farm Security Administration and the Rural Electrification Administration were especially designed to improve rural living standards.

The work of county extension agents was largely responsible for the creation of each of these special agencies now working with farm people. It is, therefore, but logical that during the 25 years his job should have changed

from that of an itinerant teacher to that of a program builder who teaches largely through the efforts of others. The average county agent is supposed to be of assistance to 3,000 farm men and women and 3,000 farm young people scattered over a territory 20 miles wide and 25 miles long. If he cannot organize his work so as to use the services of others, he will simply be lost in the shuffle.

To get an idea of just what the average county agricultural agent in Virginia did in 1938, I referred to the annual report for that year and obtained the following statistics:

This average agent -

1. Trained one judging team.
2. Trained one demonstration team.
3. Made 665 farm visits.
4. Had 4,000 office calls.
5. Answered 2,100 telephone calls.
6. Published 80 news stories.
7. Wrote 1,500 individual letters.
8. Distributed 1,000 bulletins.
9. Helped prepare two extension exhibits.
10. Conducted one educational tour.
11. Participated in one achievement day.
12. Participated in 100 educational meetings with an attendance of 5,000 people.

This means that the average county agent in Virginia for each workday in 1938 made two farm visits, had five office calls, had eight telephone conversations regarding his work, wrote five individual letters, and distributed four extension bulletins. In addition, this agent wrote two news stories and participated in three extension meetings each week. This agent also served as secretary of the county Triple A committee handling 1,500 work sheets, and was an advisory member of the soil conservation committee, the farm security committee, the debt adjustment committee and the rural electrification committee in his county.

It can be readily recognized that no one person can do the number of things enumerated above each day and have much time left to devote to sound thinking on agricultural program planning. We have, therefore, in our State devoted considerable time during the past year in trying to provide county agents with sufficient office space and office help to permit them to do efficiently the many jobs with which they are confronted.

However, we have learned through experience that even with the best office organization and the maximum assistance from field specialists that county agents alone cannot build sound county and community agricultural programs. They must have the active advice and assistance not only of representatives of other State and Federal agencies working with rural people, but of the farm people themselves. We have, therefore, set up in Virginia in most

of our counties strong county boards of agriculture with functioning community committees.

In the early history of the action agencies of the Federal Government such as the Triple A, the Soil Conservation Service, and the Farm Security Administration, each of these agencies developed its program somewhat independently of the other and largely from the top down. This resulted in some confusion and working at cross purposes, so the Secretary of Agriculture joined with the executive committee of the Land-Grant College Association in setting up committees to study the whole question of relationships and to recommend a plan of correlation. After 2 years' study and many meetings, these committees presented at Mount Weather, Va., a cooperative plan for building land-use programs and policies. All those in attendance at this meeting are thoroughly acquainted with the essential features of this program.

From an Extension standpoint the most important feature of the cooperative land-use planning project is the fact that under this project the various agencies of the United States Department of Agriculture agree that the extension services of the State land-grant colleges are the logical agencies to take the lead in building sound agricultural programs. This gives county agents an opportunity such as they have never had before, and unless we in the Extension Service are wise enough to take maximum advantage of this opportunity for leadership it will probably pass to someone else during the next few years.

In the proposed set-up the director of extension is to serve as chairman of the State land-use program-planning committee, and the county agent as executive officer of the county land-use committee. The former members of the county and community committees are farm leaders with whom county agents have been working for the past 15 or 20 years. The wise county agent will not take advantage of this situation for the purpose of trying to dominate the land-use committees but will use every effort to so guide this work as to make it possible for every other agricultural agency operating in his county to render the maximum contribution to the solution of the county's agricultural problems.

WHAT IS THE JOB OF COUNTY EXTENSION AGENTS TODAY?

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The job of the county extension agent has gone through an evolutionary process, and is marked by three rather distinct phases of development.

1. The phase when the agent assumed to know what was needed in the individual home or community and the program came primarily from her.

2. The phase when the rural people were organized into community clubs, and timely or seasonal information was carried to the group by the agent in the form of a method or result demonstration.

3. The phase when the agent and elected leader representing each organized community compiled available information, made an analysis of conditions from this information, and together selected the outstanding needs and set up a county program to meet these needs.

In the foregoing outline we see quite a logical development in the extension work. The agent in the beginning of the program was thought of as a person who had a message for the farm woman and her family, as a result of her training and experience, and in her enthusiasm to get to the farm family her own message, she generally overlooked what the farm woman herself had to contribute as a result of her years of experience in the farm home and in the community life.

The county agent's program as it is being organized and conducted today is designed to stimulate farm men and farm women to think - to think about their farming as a business, and to think in terms of action. Once a mind is awakened or stimulated, it does not necessarily stop with that particular thing that is being taught, but expands and continues to find expression in still other and more far-reaching undertakings, and in most instances is not satisfied with mediocre accomplishments. Extension work in its deepest significance is designed to help develop the individual, to discover those who have leadership ability, to arm them with information, to improve or perfect their technique, and to enlarge their vision.

With the coming of organized procedure and methods, recommended to inspire and perhaps insure a higher level of living and increased farm and home efficiency; with the coming of better homes, better crops, better livestock, a larger social and recreational life, and perhaps a more adequate farm income, there should likewise come pride of occupation, growth in education and culture, and a satisfying feeling of greater responsibility and power.

In order to attain these recommended standards for farm life, let's review the objectives of home demonstration work as set up by a national

committee and see if the carrying out of these objectives is charged to the job of the agent. These objectives are:

1. To stimulate rural people in general to recognize the value of a continuing program of education in family life.
2. To assist rural people in organizing both productive and leisure time to the end that their energies may best be conserved and utilized for their economic, social, and cultural life.
3. To emphasize with rural people the need of studying and analyzing both local and national situations in order to know their part in the solution of problems or in conformity to the solutions nationally accepted.
4. To afford opportunity for the discovery and development of leadership.
5. To provide information in homemaking practices so selected and so organized as to meet needs that are apparent to homemakers.
6. To teach by demonstration and by group discussion and to encourage the application in the rural home of recommended practices.
7. To cultivate resourcefulness in utilizing conditions peculiarly characteristic of rural life in order that there may be a growing appreciation of the opportunities of living in the country.

Her program is based primarily on home economics education. It is a part of a national system of extension work. It is a cooperative program between extension workers and farm people and it has for its purpose education in rural life.

This program recognizes that education is a continuing process and that rural homemakers, who vary in age, ability, education, and experience, should have educational resources which will help in meeting the changing problems affecting the rural home.

The fundamental objective of home economics extension education is the development of rural family life. It is concerned with methods of stimulating the desire and providing the opportunities for such development. This objective is achieved through the use of home economics applied to other fields of education.

With these definite steps as to the development of the home demonstration program and with the objectives of her program defined by a national committee, may I enumerate what seems to be the home demonstration agent's job. She must have in her training the fundamentals of the basic home economics fields; such as, foods and nutrition; clothing and textiles; child development; housing, including furnishings and equipment; home management; and family relationships. Then, in her job she must apply these

fundamentals to the situations in the county. Since the job today must be determined by today's needs, her job is to know her county, its people, its agriculture, and its problems. She must know at least some of the things that are standing in the way of agricultural progress in the county. She must know the already existing organizations and help them to function in the agricultural field, for they make assistants if she is wise enough to counsel them. She must know personally the leaders in the county whether they be farmers or bankers, teachers, or artisans. She must know the existing agricultural agencies within her county, their scope, and the content of their program. She must recognize that there exists specialized programs for each family member, for example, 4-H Clubs, Future Farmers, home demonstration clubs, Farm Bureaus, vocational agriculture and home economics classes, county health programs, recreational programs; and in addition to the programs named, other educational factors enter the life of farm people today. The daily newspaper, with its syndicated articles; the libraries, with free circulation of books written by our best educators; magazines, with specialized departments offering worthwhile suggestions; and more recently the radio has come into the educational arena, and she, as an extension worker, probably has not realized its full possibilities as an extension medium.

With the numerous agricultural programs available to the farm family, the varied methods of disseminating information, and the increasing mediums through which adult education can be promulgated, it becomes increasingly necessary for the county agents to take stock and see what then becomes important in their job.

What are some of today's needs in the county extension program?

1. A carefully thought-out philosophy of farm-family education.
2. An understanding of the needs and interests of the farm group.
3. Development of goals and attitudes of farm people toward sane and satisfying farm family and community living.
4. Concern for the level of agricultural education of farm families.
5. Ways and means of integration of the home demonstration program with all other programs, so that facts gained from experience may be reinforced by practical application and adequate understanding.
6. Thought for the social situation, and for recreational needs, and for participation by the farm families in this program.

What should be a part of the procedure on the part of the agent to get this job done?

1. Cultivate an open mind.
2. Draw heavily on all sources of information.

3. Present materials and information so that attitudes essential to rich and significant living may be developed.

4. As a leader, keep flexible, alert, active, and growing.

5. Stimulate better farming and homemaking by bringing rural men and women together in groups for study, work, or play, in order that they may be better fitted to solve their problems as they relate to the family unit, and to the community group.

6. Develop the home demonstration extension program as it relates to the farm family rather than to project activities.

7. She must encourage and develop leadership, then direct the trained leaders in the execution of their part of the large program that has been so carefully planned by the farm people themselves with the assistance of the agent and State staff.

8. Hers is an executive job, for it is only through the organization of herself, her office, and the program that even meager results may be expected. She must know how to lead, how and when to follow, how to organize, and how to use her organization.

9. Hers is a teaching job; it is full of interest, dealing with human affairs, community and county problems, and with life as it is, and as it may be.

10. She must see her job as a whole. See home demonstration work as it unifies the farm and the farm home program and as it correlates all home economics programs that contribute directly and indirectly to the life of the rural people within her county.

1. The first principle of the philosophy of the human mind is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

2. The second principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

3. The third principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

4. The fourth principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

5. The fifth principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

6. The sixth principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

7. The seventh principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

8. The eighth principle is that the mind is a faculty of knowledge, and that knowledge is the result of the mind's activity.

